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ART. I. *On the Principles of Design.* By T. SOPWITH, F.G.S.

No. 1. ARCHITECTURE, — continued from Vol. III. p. 400.

THE defects which prevail in the interior arrangement of many of the churches of the establishment have not only had the effect of estranging many hearers, but of causing very serious, and, in some cases, fatal results, to those who attend. Public attention never seems to have been sufficiently directed to this important and venerable department of architecture; nor is it unreasonable to suppose that the discomfort and want of accommodation of the churches in many towns, and of nearly all in those in the country, have tended to promote dissent, and to strengthen the aversion which of late has been manifested to contribute to the repair of these sacred edifices. This is not the place to enquire how far the establishment of the church has tended for nearly three centuries to preserve a uniform and sublime devotional service, which by many has been deemed one of the firmest pillars of social order. Certain it is that no one who has been accustomed to it from infancy can regard it without admiration. That a uniform and reverent performance of divine service may long be numbered among the institutions of the land is, probably, the sincere wish of every cordial lover of his country; and, with reference to this prospect, and to the rendering it available at all times, and to any required extent, the following remarks are suggested.

I have already briefly hinted at some of the inconveniences which arise from the prevailing practice of imitating ancient churches, instead of adapting them to modern objects and to modern habits. Religious services were formerly more a matter of splendid ceremonial, and impression on devotional sentiment, than of that calm reflection and sincere and rational piety which now happily prevail in a large, and it is to be trusted, increasing part of the community. The former impressions were in admirable unison with, and heightened rather than impaired by, those architectural arrangements which have been alluded to, as

being in some degree incongruous with the objects of modern Protestant worship. By many architects, and indeed by nearly all of the profession, the models afforded by ancient cathedral and other churches are deemed to form a standard guide in selecting the form and arrangement, as well as the decoration and expression of style, of a modern church. To any attempt at what would be called a mechanical arrangement expressly adapted for the use of a modern congregation, a strong feeling of objection is entertained; and the public taste is conceived to warrant an adherence to the ancient style, with all its imperfections, rather than suffer any attempt at modern innovation. For this feeling, which, I am aware, exists to a great extent, both with professional persons and in the public mind, there is certainly some foundation; for it must be confessed that the great pictorial beauty and grandeur of expression of the cross-like churches, and the interest conferred on them by long and impressive associations, cannot easily give way to any new and untried mode of building. I say new and untried; because there has not, that I am aware of, been any church erected solely with reference to its fitness for the purposes for which it was designed, and a due regard to that expression of style which is essential in a place of public worship.

It is scarcely possible to enter a church, without at once perceiving in it many circumstances which strike the mind of an attentive observer as being grossly at variance with strict propriety, as regards the principle of fitness for the desired object. This arises, in a great measure, from the churches having been built with reference to a mode of worship which required a different arrangement to that which would best suit the service of a Protestant congregation; but, still, it is lamentable to see how much more might have been done, in adapting them to their present uses, if the principle of fitness had been kept steadily in view. The adaptation of the principle of fitness to any given building requires a knowledge of, 1st, the objects for which a building is intended; 2dly, the extent to which these objects are required; 3dly, the local and other circumstances which limit the range of abstract principles; 4thly, economy, which includes either the knowledge of the expense necessary for the perfect results that are required; or the accomplishment of the maximum fitness that can be obtained for any given amount placed at the architect's disposal; and, 5thly, the local habits and customs of the persons for whose use a public building is designed.

Now, as regards churches, they may be classed under three heads: 1st, Cathedral or Collegiate Churches; 2d, Churches for the accommodation of a large auditory, as in towns; and, 3d, Village Churches, where the number of hearers is comparatively small.

To each of these a different rule of *fitness* applies; and, first, of cathedrals. Among the chief characteristics of the greatness and splendour of the British empire, the structure and service of its magnificent cathedrals have always had a powerful hold on my feelings and admiration. On beholding those mighty monuments of former piety, those gigantic remnants of past glories, the contemplative mind is impressed with elevated and sublime ideas. Historical importance and architectural effect alike combine to arouse the noblest sentiments; and, with feelings of intense admiration and religious awe, I have entered the walls of many of our English cathedrals. I am led to speak more fully on this subject, because I do not think that the whole range of architecture, ancient and modern, presents to the mind a more perfect example of the powerful and impressive effect produced by a building founded on correct principles of design. Most of our cathedrals combine an exact aim at fitness for the objects for which they were erected; with a great degree of appropriate architectural embellishment or beauty, and a description of expression so venerable and impressive as to leave no room for doubt whether the true character of a religious edifice has been achieved. An admiration of this kind was firmly impressed on my mind on a first visit to the "Grey towers of Durham," and the recollection of it is preserved in a *Journal* written at the time, from which the following is an extract.

"The effect on entering the middle door of the screen is uncommonly grand and striking. The marble floor, the stalls surmounted with richly carved pinnacles, the elevated throne of the prelate of the diocese, the light and elegant screen of the chancel, with the magnificent wheel window and the tall and stately lights of the Chapel of the Nine Altars, possess a character of sublimity, the effect of which is greatly increased by the grandeur of Divine service as daily performed here. When the majestic pile vibrates, as it were with tremulous joy, amidst the thundering echoes of its powerful organ; or when the dulcet and mellow tones of that instrument accompany the softer music of the choir, the effect is thrilling beyond description. The melancholy and affecting cadence, and the pathos and mournful sublimity, of the chaunted responses, are, I think, superior to any musical effect I ever heard. The senses receive with delight, and the mind dwells with rapture on, sounds which appear almost beyond the reach of human skill; so exquisitely perfect is the choir of this cathedral, in this department of the service. Handel's Coronation Anthem, 'Zadok the priest,' was performed; and that majestic composition expressed on so brilliant an organ, accompanied by so perfect a choir, and heard under so magnificent a roof, amply repaid me for my visit. The evening anthem, also, was

uncommonly grand; the shaking of the mountains, and the trembling of the earth; and the raging and swelling of the waves of the ocean, being indicated by the music, which was followed by a treble duet expressive of confidence in God.

"The more I see of this cathedral, the more am I delighted with the skill and taste displayed in the architectural arrangements of our forefathers. In them, we often contemplate a race of rude barbarians; their princes, unlettered and ferocious conquerors; their nobles, haughty, ignorant, and ambitious warriors; and their monks and priests, a plodding, selfish, and indolent train. But let us hear them plead. Let us leave for a time these darker shades of history, and view them through the medium of their works. To form a judgment by these, the throne, the aristocracy, and the church, seem to have expended their unwearied exertions in the promotion of art, and in the foundation of structures, many of which yet remain to attest the munificence and taste of their founders; while others have perished in the revolution of ages; indicating by their ruin the all-pervading and immutable truth, that the fashion of this world passeth away."

For the original purpose of cathedral structures, considered either as temples of the Roman Catholic church, or as connected with the monastic institutions, of which in many instances they formed an appendage, the general form and arrangement of the Gothic cathedrals were well adapted. The genius of Wren, however, if left to that free control which can only be safely entrusted to master minds, would have struck out a new path in this style of building more conformable to the objects required for Protestant usages. This was prevented partly by difficulties arising from the materials he had to deal with; and partly from a want of confidence, as well as a want of taste in those who had a controlling power over the architect. Hence, St. Paul's, magnificent as it is, is no doubt much less so than it would have been, if Wren could have exercised his unfettered judgment, in the production of a magnificent and *original* design.

A cathedral structure, on so great a scale as that of St. Paul's, derives an imposing character from the great extent of the several masses of building presented on its exterior, and from the vastness of the space enclosed within its walls. In this description of building an impressive and sublime aspect may be considered as one of the chief objects aimed at; and, so long as the proportions and decoration are not discordant with general and well recognised principles of architectural style, extent and magnificence seem principal elements in the fitness of the design. A large portion of the cathedral service consists of organ and choral music, to the effect of which the loftiness of the roof, and the extent of the buildings, are highly favourable. As regards

preaching, the space appropriated to the accommodation of the auditory is usually limited; and, small as it is, the arrangement of the choir seems never to have been intended for distinct hearing. This was of little consequence in the Roman Catholic church, the devotion of which consisted rather in repeating prayers, and performing ceremonies, than in listening to sermons. Had the distinct hearing of the preacher been kept in view, a greater loftiness of the wainscoting, and the placing of the pulpit in a recess with a lofty semicircular dome above, would have confined the sound, which now, in most cases, is lost in open space, or destroyed by a flat unmeaning board, placed horizontally over the preacher's head, and to which the name of "sounding board" has been most improperly applied; as any one, who for a moment considers the manner in which sound is transmitted, may easily conceive. As regards ventilation, cathedrals are, by their form and loftiness, well adapted for obtaining purity of air; but temperature has been altogether neglected, and hence most cathedrals produce a sensation of extreme coldness in winter, while, even in summer, the coolness within their walls not unfrequently forms too great a contrast to the genial warmth of the exterior. This alone is a defect which would greatly operate against numerous and regular assemblies of people meeting in them. It is, however, unnecessary to follow in detail those minutiæ in the construction of cathedrals which render them ill adapted to their modern use. Cathedrals may be regarded rather as memorials of the past than as studies for the future; and the principal effect now produced by them is, the sudden transition they afford, from the whirl and turmoil of business, to the quietness and repose of their ailes. Deeply is it to be regretted, that any part of these solemn structures should be shut out from the free inspection of the public; and still more grievous is the system of mean extortion which too often shocks the visitor who is disposed to spend a little time in them, in contemplation or study. The original object for which these long-drawn ailes and fretted vaults were designed having, as regards the national establishment, passed into oblivion, it could not be better replaced than by rendering them fully accessible to the public, as places of quiet retirement from the world; and, at the same time, galleries of national sculpture, commemorative of the glorious actions of virtuous and enlightened men. If the public were accustomed from infancy to have free access to these venerable piles, it is probable that very happy and beneficial effects would flow from it. Many persons would gladly avail themselves of an occasional retirement to study the lessons of worth and patriotism recorded in the sculptural adornments of the walls; and such a study might tend to enlighten the mind, and to improve the heart.

The following may be considered as the principles of fitness to be now observed in the arrangements of a cathedral church, as regards the adaptation of existing buildings to the performance of the Protestant worship: —

1st. As the main object of every ecclesiastical structure is the due performance of religious services, every church should afford sufficient accommodation, not only for those who perform the service, but also for as many auditors as can be accommodated within the space usually assigned to the public in cathedrals.

2d. This space should be enclosed as much as possible to a height of from twenty to twenty-five feet on every side; and no recesses for doors and windows should be left, if they can be reasonably avoided, in order that a nearly uniform surface, diversified and enriched by bold carving, should prevent the dispersion of sound.

3d. The position and construction of the pulpit should be carefully studied, with express reference to confining the sound as much as possible in the direction of the auditory, and especially so as to prevent the sound from being lost in the vast space above.

4th. To effect this, it is probable that the erection of an arched canopy of sufficient space to surround the pulpit at the distance of 5 or 6 feet, and rising to the height of from 6 ft. to 10 ft. above the preacher's head, would produce the desired result. This canopy might be made strictly conformable to the architectural style of the building, and would form an ornamental and very appropriate, because useful, addition to the choir of most cathedrals.

5th. The position of the pulpit should not be very far in advance of the altar, or communion table, in order that the east wall, or screen, behind it, may operate in throwing the sound forward. It should also be situated towards one side of the choir, in conformity with the arrangement of stalls, which form an essential feature in this style of building; and in order that the middle line of view, which in most cathedrals is exquisitely beautiful, may be fully exposed.

6th. The temperature of the interior of cathedrals should be kept agreeably cool in summer, and moderately warm in winter, without which they can never be freely attended by any considerable number of persons.

7th. The approaches to the choir, such as the nave and transepts, with their side ailes, which were originally designed for processions, and for other services of the Roman Catholic worship, may now be considered as galleries for the erection of national monuments; and, in any new arrangements or alterations, this should be the end in view. With this object, the interior

of cathedrals should be rendered easy of access; and, if gained by large open doors, not only would the true character of a national temple be preserved, but a degree of free ventilation in the interior, which would be of the greatest advantage.

8th. In conspicuous places of a cathedral, a programme of the names of preachers, and of the musical service, should be presented to view. This, in some measure, is now done in St. Paul's Cathedral; and if more attended to, and especially if notified weekly in some of the public prints, there is little doubt that the attendance of the public would be much increased. If ever the love of art shall be generally disseminated among the various classes of society in this country, the architectural splendour of cathedrals, their sculptured monuments, and the musical services performed within their walls, will always afford a high degree of gratification; and, under the influence of so improved a taste, the ailes of a cathedral would be appropriate places for sculptures and paintings illustrative of religious subjects, which, being at all times of free access, would afford the public opportunities of cultivating a knowledge of art, under circumstances and impressions highly favourable to the developement of religious and moral sentiments. Such a use would, in my estimation be the true object of an extensive nave and transepts, were such employed in designing a new cathedral; and to such a use, or *fitness*, the existing cathedrals might, in a great measure, be adapted.

9th. Considered as galleries of sculptured monuments, two objects would require especial consideration; viz., the management of the light, and the arrangement of the monuments in accordance with some general design, so as to afford large spaces for groups of marble sculpture; and, at the same time, less spaces for plain tablets, which might be erected at a moderate expense; and which, though plain in themselves, would thus harmonise with the rest. A very excellent design of this kind was proposed, some years ago, by the then vicar of Newcastle, the Rev. John Smith, but, as it was adapted to the transept of a parish church, and as the subject is one which may be noticed under that head, I shall take occasion again to advert to it, when speaking of those parochial edifices in which the principles of fitness required are more numerous, and much more varied in their application.

Newcastle, June, 1837.

ART. II. *On the Obelisk from Luxor recently elevated in Paris; with some few Remarks on Obelisks generally.* By GEORGE GODWIN, Jun., A.I.B.A.

(Read at an Ordinary Meeting of the Institute of British Architects, 1836.)

A GREAT degree of interest having been excited by the transport of the Egyptian obelisk from Luxor to the capital of France; and by its ultimate erection in that city (to witness which, it may metaphorically be said, the whole of Paris stood on tiptoe for three days, during the most inclement weather), I am led to believe that some observations, partly gathered by an eye-witness, in relation thereto, with some few loose remarks on obelisks generally, although not intended by any means to present a perfect view of the subject, may not prove unacceptable at the present moment; and I therefore lay the following before you. I should, perhaps, say, in introduction, that from the great difficulty, which ever exists, of obtaining accurate information during the excitement produced by any remarkable event, I am unable to assert the fidelity of every detail given; but may with safety affirm that nothing is stated but what I believe to be correct.

The Egyptians, who seem, in a greater degree than any other nation, to have built for posterity, have left behind them a vast number of isolated stone pillars, rectangular in their form and tapering towards the top, which have been termed obelisks. Relative to the date of the origin of these *monoliths* (for they are always of one stone), which, from the simplicity of their form, and their colossal dimensions, have ever excited wonder and admiration, and, in all cases, bear witness to the persevering industry, if not genius, of the people by whom they were fashioned, nothing is known. They are mentioned, however, by some of the earliest writers, and were intended, probably, in the first instance, as memorials of certain events, such as a civil contract or a solemn covenant, or as marks of honour to the memory of distinguished individuals; although, perhaps, afterwards erected to gratify the pride of conquerors, or to adorn a temple. Nor does the custom appear to have been confined to the Egyptians; the practice of setting up a stone for such purposes being general with most of the early nations. The first mention, perhaps, that we have of it is in the 28th chapter of *Genesis*, where it is stated that Jacob, after his dream, in which he beheld a ladder extending from earth to heaven, set up the stone which had served him for a pillow, poured oil upon the top of it, and called it the house of the Lord. On this occasion, however, it is not mentioned as an extraordinary proceeding, but as an established rite; and, in various other parts of the Holy Scriptures, the practice is alluded to.

In India, and on the borders of the Red Sea, many pillars of

a single stone have been found. The Grecians for a long period, it is said, had no other monuments than unhewn pillars, which they erected on their tumuli. The early Saxons raised numerous obelisks as sepulchral monuments, which they covered with mystical signs and inscriptions, termed *runes*, as did other of the northern nations. Near the town of Boroughbridge stand three remarkable obelisks called the Devil's Arrows, which Stukely the antiquary, and some others, suppose to be of British workmanship; and we find, from Holinshed, that the ancient Scots usually had about their graves as many obelisks as they had killed enemies in the field during their lives. By no nation, however, were obelisks so generally used, or carried to such a degree of perfection in their execution, as they were by the Egyptians. They appear originally to have been placed by them in pairs, before the edifices devoted to religion, or the dwellings of their kings, to distinguish them from others; while upon their sides, in their mysterious hieroglyphics (many of which, it is supposed by a companion of the late talented Champollion, were painted as well as sculptured), were recorded the name of the reigning monarch, and events connected therewith. Those which remain (and they are numerous, for they seem to have tired Time) have, consequently, proved to the moderns most valuable chronicles by which to elucidate Egyptian history; and, as our knowledge of these hieroglyphics increases, we shall no doubt be able to draw more largely on this abundant and interesting source of information.

On the origin of the term *obelisk*, there is a great difference of opinion among those who have studied the subject, as there ever is concerning matters on which no direct proof can be advanced. From some of the ancient writings it may be gathered that these monoliths were principally devoted to the sun: and, according to Pliny, the name in the Egyptian language expresses the idea of a ray of the sun, while their form presents the resemblance of it. Others have regarded the name as proceeding from a Greek word signifying a needle or skewer (*obelos*), but it does not seem possible to arrive at a conclusion.

The Egyptian obelisks seem to have been usually formed of the rose-coloured granite from the quarries of Syene: and, if we give praise to Fontana, who, as we shall see, raised one of these surprising monuments before the Cathedral of St. Peter at Rome; or to M. Lebas who has just now done the same thing at Paris, although with simpler means; how much more must we extol the science, the judgment, and the perseverance, which enabled the Egyptians, in those early times, to detach these large masses from their native bed in the quarries, to fashion them (hard and almost invincible to the workmen as the granite was) to their present form, to cover them from head to foot with sculptures,

and then to transport them over a mountainous country, and place them upright in their destined stations.

Of the means used by the Egyptians to effect all this we have no information. To separate the blocks from the rock in the first place, probably the chisel only was used, labour in Egypt, at that time, being literally of no cost; and we learn from Pliny, as quoted by Rollin, that in cutting the obelisk which Constantius afterwards removed to Rome 20,000 men were employed. They might, however, have used wedges, or have adopted the course now pursued, with a similar object in view, in the granite quarries near Seringapatam; where (as Sir John Herschell relates in his *Discourse on Natural Philosophy*) the most enormous pieces are split off by a very simple operation; it is as follows. The workman having found a portion of the rock sufficiently extensive, and situated near the edge of the part already quarried, lays bare the upper surface, and marks on it a line in the direction of the intended separation, along which a groove is cut with a chisel about 2 in. in depth. Above this groove, a narrow line of fire is then kindled, and maintained till the rock below is thoroughly heated; immediately on which a line of men and women, each provided with a pot full of cold water, suddenly sweep off the ashes, and pour the water into the heated groove, when the rock at once splits with a clear fracture. Whether the ancients made use of this method, however, we are unable to determine. To transport the blocks of stone, when quarried, to their destination, it is supposed that the Egyptians must have dug canals into the very quarry; through which the water of the Nile ran in the time of its inundation; and thus, on rafts proportioned to their weight, the obelisks were conveyed to the required spot. The Roman emperors, anxious to adorn their capital, and to display their triumph over Egypt, transported many of these obelisks to Rome; we are, in fact, told by Publius Victor of forty-two, great and small, which were conveyed there, between the reign of Augustus and that of Constantine. At this moment, there are not, perhaps, more than a dozen in Rome which have withstood the effects of the stormy times to which they were exposed. The principal two of these are, the one standing before the Church of St. John Lateran; and that before the Cathedral of St. Peter; both placed in their present situation by Dominique Fontana, under Pope Sixtus V. The latter of them was brought from Heliopolis by Caius Caligula; and originally stood near the Vatican at Rome. Sixtus, wishing to place it before the new cathedral, but almost frightened by the apparent difficulty of the undertaking, called around him the most celebrated men from all parts; and more than five hundred plans for removing it were submitted to him. The one selected was by Fontana; and, although the pope feared at first

to trust to him the execution of his own scheme, he was ultimately allowed to conduct it, and succeeded in effecting his purpose in September, 1586. (See *Quatremère de Quincy's Vies des Architectes.*) The work published by Fontana descriptive of the means he employed, and the fourteen or fifteen engravings (if I remember rightly) which he has given of the operation in various stages, show how complicated was the machinery, and how powerful the apparatus employed. 40 capstans, 140 horses, and 800 men were engaged in this undertaking. The height of the obelisk is about 83 ft., and the base hardly 9 ft. wide, which dimensions are not much greater than those of the Luxor obelisk, as we shall see, although the weight of the former was certainly nearly double that of the latter.

To return, however, to our more immediate purpose, the obelisk from Luxor. Ancient Thebes; the city of the hundred gates, the mysterious, the magnificent; at the appearance of whose ruins, we are told, the French army, when they entered it under the command of Napoleon, involuntarily and unanimously clapped their hands, extended on both sides of the river Nile as far as the mountains. All who have visited the spot describe the effect produced by the magnificent assemblage of ruins there presented as powerful in the extreme; some, as even appalling. "It appeared to me," said Belzoni, "like entering a city of giants; who, after a long conflict, had been all destroyed, leaving the ruins of their various temples, as the only proofs of their former existence." If this then be now the case, when all is desolation, what an aspect must have been presented by Thebes when in its high and palmy state, when the streets resounded with the hum of busy men, and its temples were thronged about with wondering votaries; when Egypt was considered as the most renowned school for wisdom and politics; and the city of which we speak could send out at once 200 chariots and 10,000 fighting men at *each* of its gates. (*Rollin.*) We must not, however, speculate: its teeming population was dust centuries ago, its glory has long since passed away, leaving little record save that presented by its ruins; and four unimportant villages now occupy the site of this once mighty city; namely, Luxor and Carnak on the east, and Gournon and Medinet-abou on the west.

Now at Luxor, as there are also at the other villages, are the remains of a spacious temple, said to have been about 800 ft. long, which was approached through a vast propylon or gateway, before which stood two magnificent obelisks of red granite from the quarries of Syene, entirely covered with hieroglyphics; and it is the smaller one of these obelisks which now stands in the Place de la Concorde at Paris.

The French government obtained permission from the vice-

roy of Egypt, in 1831, to carry both of the obelisks away. It was resolved, however, to bring at first but one, and the direction of the arduous undertaking having been entrusted to M. Lebas, a naval engineer, a large vessel was constructed at Toulon called the Luxor; and in the month of March the expedition departed. After much difficulty, arising chiefly from the strength of the current, and the terrific heat of the weather, which was so great indeed as to destroy all their stores, they succeeded in ascending the Nile, and safely arrived at their place of destination. The soil having accumulated considerably around the base of the obelisk, this was first cleared away; and an inclined plane was then formed from the monolith to the vessel on the river, to do which it was necessary to cut through two vast heaps of rubbish, and to destroy part of a village. All this, however, by the labour of eight hundred men for three months, was accomplished. M. Lebas then strongly cased the mass with planks banded together, in order to protect the arris from injury, and every thing being thus prepared, the engineer proceeded to lower the obelisk. The means adopted to effect this so nearly resemble (at least in principle) those by which it was afterwards erected in Paris, that I shall refrain from any mention of them until speaking of that operation; suffice it to say, that the obelisk was lowered, and conducted down the inclined plane; and, the head of the vessel having been removed (for which, probably, a previous arrangement had been made during its construction), it passed without interruption into it, and the vessel was again made perfect. When we remember that this immense mass was thus moved without any material accident, or the least damage to itself, we must accord the highest praise to M. Lebas, the enterprising director of the undertaking; more especially when we call to mind the fact, that all these operations were carried on under a burning sun, and in a country almost desolate, and incapable of supplying him with any thing that he needed.

The obelisk was embarked, but the difficulties of the enterprise had not ceased; for, to guide a mass so cumbrous through the stormy seas of the Mediterranean, it may be readily believed, was a task of no ordinary risk; this, however, was accomplished happily, and, after touching at Gibraltar, the same vessel which brought the obelisk down the river Nile, ascended with it the river Seine, and this splendid trophy both of ancient and modern intelligence was safely deposited near the Pont de la Concorde, Dec. 23., in the year 1833. Here it remained until the last year untouched, in consequence, among other things, of the non-arrival of the vessel (the same that had brought the obelisk to Paris) which had been despatched to the coast of Brittany for granite to form for it a proper pedestal. After the return of the

vessel the pedestal was erected, consisting of five blocks of gigantic dimensions, cut and polished to appear but as one stone. One of the blocks, namely that forming the die of the pedestal, is about 16 ft. long and 10 ft. square. M. Lebas then constructed an inclined plane, commencing at some little distance from the river, and terminating at the top of the pedestal, in the centre of the Place de la Concorde, of pieces of unhewn stone and mortar, on which planks, firmly bedded on sleepers, were laid, to form a railway on which the obelisk might travel. A sort of car was then made, of such a form that, when placed upon the inclined plane, its upper surface was horizontal; and the monolith having been put upon this, a steam-engine of 40-horse power, erected for the purpose, was connected with it, and put in motion, in order to drag it up the plane. From some mismanagement (not on the part of M. Lebas, who from the first was opposed to the use of the engine), this portion of the process failed; for it was seen, on first putting it in action, that the car would have been pulled from *beneath* the obelisk, notwithstanding its great weight; and in fact this did take place to a certain degree. The steam-engine was therefore abandoned, and 300 artillerymen having been placed under the control of M. Lebas, he attached the obelisk to ropes connected with five capstans, and by the sound of trumpet it was raised nearly to its intended situation, without any apparent effort on the part of the men. The railway, during this operation, was plentifully supplied with hot grease, to lessen the friction; but it is the opinion of one who witnessed the undertaking, that little advantage was gained by so doing.

I said it was raised *nearly* to its situation, for it was found impossible to place it exactly in the proper position by means of the capstans. By the last turn of the levers it had been brought to within so trifling a distance of the required spot, that any additional movement on the part of the capstans would have thrown it beyond the line; in which case the success of the operation would have been rendered extremely doubtful. Here then was a great difficulty at the moment almost of success, a shipwreck within sight of port; and for some little time, I believe, M. Lebas himself was in much perplexity. He, however, who had lowered it safely in Egypt under the greatest disadvantages, who had brought it across the sea, and placed it so nearly at its destination, was not found wanting at this critical moment. He applied the battering-ram, and one fortunate and well-directed blow drove the enormous mass exactly to the required line. It now only needed then to be raised perpendicularly; and an examination of the diagram, *fig.* 105., will, perhaps, sufficiently explain the means he made use of for this purpose.

It was about half-past eleven in the morning when the first signal was given, and the capstans put in motion, and in less

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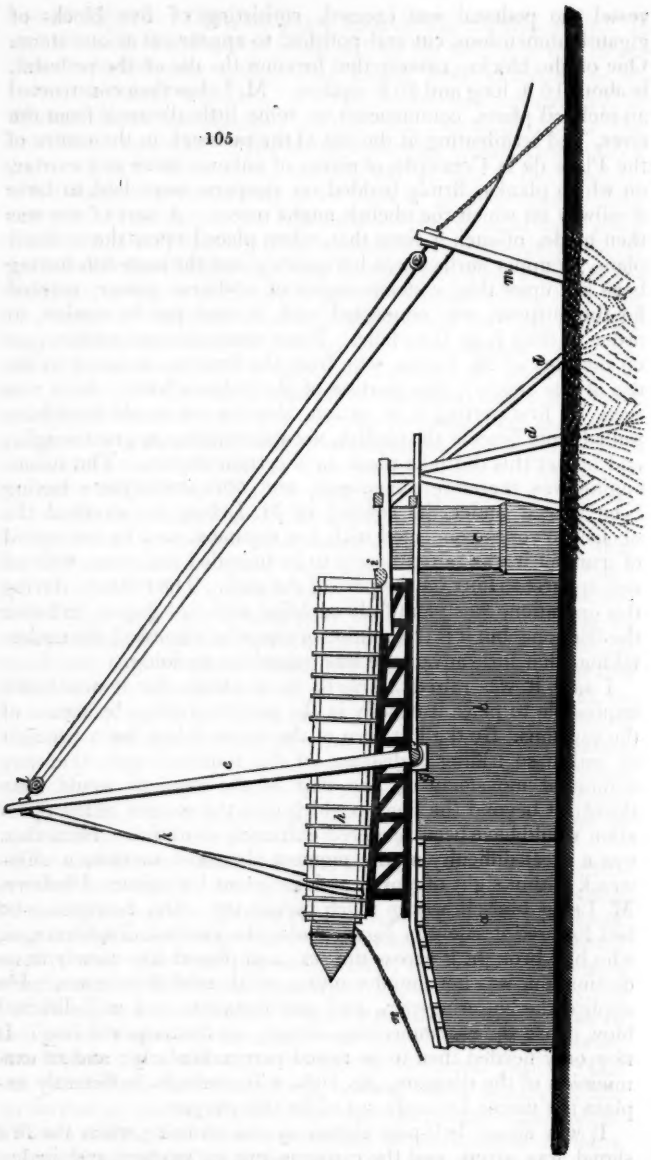

than ten minutes the end of the obelisk had described an arc of 10 ft. At this moment, a slight crash was heard, and the operations were immediately suspended. As may be easily imagined, the feelings of anxiety and excitement which pervaded the breasts of all the immense multitude assembled, became intense in the extreme; but after the expiration of an hour, during which time additional precautions were taken, the capstans were again put in motion, and without the least oscillation the immense mass was gradually raised into its present situation; where, as a French architect writes, it will probably remain until some terrific convulsion of our globe occur to displace it. The time really occupied in raising it from the horizontal position, deducting that employed in readjusting the machinery,

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Explanation of References in fig. 105.

a, Upper end of the inclined plane.

b, Level platform of rough masonry, forming a continuation of the plane; but spreading out on each side as a foundation for the apparatus.

c, The granite pedestal erected to receive the obelisk, strongly banded by large timbers, and strengthened by the shores *d d*, driven deeply into the ground. From around these shores the earth was removed to a considerable depth, and its place was supplied by ingots and wedges of iron carefully rammed in.

e, One of ten fir masts, about 70 ft. high, and 18 in. in diameter, erected five on each side of the obelisk, and firmly secured together at the top by two cross pieces and ropes. The bottom of each mast was strongly attached to one large piece (*f*), which was rounded on its under side, and worked freely in a hollow formed for it in a great beam (of which *g* shows a section) that passed from one side of the platform to the other. On the cross piece at the top of the masts were attached ten powerful pulleys.

h, The obelisk in its wooden casing, with the car on which it had been brought up the inclined plane.

i, A strong piece of timber, rounded on its under side, and working in a hollow formed for it in the timbers encircling the pedestal. This, which perhaps was one of the most elegant portions of the arrangement, received the foot of the obelisk when brought up the inclined plane, and, serving during the process of elevation as a hinge upon which it turned, ultimately guided it into the exact position on the pedestal that it was intended it should occupy.

The top of the obelisk was attached to the upper end of the ten masts by the ropes *k*; and other ropes fastened to each of the ten pulleys (*l*,) after passing round the multiplying pulleys on the timbers *m* (which were driven into the ground and secured by chains), were connected with capstans, each manned by thirty men. If, then, what I have said is as clear as I should wish it, it is hardly necessary to state that when the ten capstans, thus called into action, were put in motion, the masts were gradually drawn from their perpendicular position to a horizontal one; and while so doing gradually raised the obelisk, which turned on the hinge *i*.

n Represents a strong chain connected with a capstan at the foot of the inclined plane, in order to regulate the ascent of the obelisk, and prevent a too sudden fall when it had nearly reached a perpendicular position.

as above-mentioned, was two hours and a half. To M. Lebas, the scientific director, every honour is due for the simplicity and excellence of the means he employed, and the great judgment he displayed (apparent from the fact that in every case the results exactly agreed with his anticipations). This, I am glad to say, has been fully acknowledged in the French capital, although, of course, detractors have not been wanting, and he must have felt himself rewarded for much of his anxiety, when the countless multitude who had witnessed his triumph in the Place de la Concorde simultaneously turned towards the king, who was seated in a neighbouring balcony, and rent the air with their applause. Numberless as are the cares and anxieties consequent on the duties of an architect or engineer, the difficulties continually arising in his path, only to be removed by the most unremitting application and the most wary walking, rewarded ofttimes, too, with coldness, if not reproaches — there are moments when all is paid for with great and glorious interest, and this epoch in the life of Lebas I should consider as one of them.

What pecuniary reward M. Lebas received I do not know; but it gives me pleasure to learn, from a letter recently received by T. L. Donaldson, Esq., from M. Guenepin, a distinguished French architect, that the king, in addition to the riband of the Legion of Honour which M. Lebas had possessed for some time, has appointed him Director of the Musée de Marine, in the Palace of the Louvre. Besides which, as M. Guenepin jocosely states, he has had the honour of being caricatured as a rope-dancer performing with the obelisk under his arm. It may, perhaps, be well to say here, that Fontana, after his undertaking, was created a Knight of "the Golden Spur;" and that a pension of 2000 crowns of gold was settled on him and his heirs for ever by the pope, besides an immediate present of 5000 crowns of gold; in addition to all the timber and other materials employed in raising the obelisk, which were presented to him, and which were valued at more than 100,000 francs, or 4000*l.* sterling. (*De Quincy.*)

Beneath the obelisk was placed a box made of cedar, containing, according to the custom both in England and France, the current coins of the realm in gold and silver; as well as two medals displaying the head of the king, and this inscription: —

"In the reign of Louis Philippe I., King of the French, (M. Gasparin being Minister of the Interior,) the Obelisk from Luxor was placed upon its pedestal, the 25th of October, 1836, under the direction of M. Lebas, Naval Engineer."

The height of the obelisk is about 76 ft.; the greatest width at the base, for it is not square, is 8 ft.; and the weight is calculated at 250,000 kilogrammes, about 250 tons, or perhaps hardly so much, for the calculations differ.

Like all the other Egyptian obelisks, it is four-sided, tapering gradually, and almost imperceptibly, upwards, until within a little distance of the top, when it suddenly terminates in a small pyramid. The faces of this obelisk, it is singular to observe, are not perfectly flat, but display a slight convexity, executed in such a way as to show design; and this is the case in some other instances.*

Each face of the stone is covered by three vertical ranges of hieroglyphics, displaying a finish and purity of design somewhat remarkable. The middle range of these is cut in to a considerable depth, while the others are but slightly marked; and, by this difference in the relief, a pleasing effect is produced. Those on the upper part of the stone, too, are more deeply indented than on the lower, in order to overcome the effect of distance. These hieroglyphics, which were deciphered by Champollion, show, it is asserted, that the obelisk was commenced by Rameses II., king of Egypt; but that it was completed by Rameses III., who is supposed to be the Sesostris of Herodotus; two names having been found on it. The name of a king by whom an obelisk was erected is usually seen on it, enclosed in a sort of frame standing on a base, and called a *cartouche;* and it is from finding two different cartouches on the monolith of which we now speak, that the above conclusion was arrived at. Some, however, have contended that they represent the same person (and the difference between the cartouches is certainly slight): but, be this as it may, it is nearly certain that the obelisk was not raised until the reign of Sesostris; for his cartouch was discovered by M. Lebas on the bed or under side of the obelisk. The stone was split upwards from the base nearly one third of the height of the obelisk; and, to prevent the spread of this slit, some wooden cramps or tenons had been put in, on each side of which appears this name. The various other hieroglyphics recite his praises, and the terms by which he was distinguished, "Cherished of Ammon," &c. Sesostris, who subdued Asia, and advanced farther into India than Alexander ever did, was one of the greatest conquerors of whom we have any record. Herodotus says, he saw in Asia Minor (from one sea to the other) monuments of his victories; and, even in Thrace, *pillars* were found, on which was the following inscription: — "Sesostris, King of Kings and Lord of Lords, subdued this country by the power of his arms." (*Rollin.*) He raised a hundred famous temples as evidences of gratitude for his victories; and, after com-

* I learn from a daily paper that the surface of the obelisk has been covered with a concentrated solution of caoutchouc, to preserve it from the atmosphere, which is found to have an injurious effect upon the granite of Egypt, although it does not at all injure the granite of France. The quantity used was eighty-four quarts.

pleting many works that contributed to enrich Egypt, died (it is said, by his own hands) about 1458 years before our era; so that the age of this obelisk, without dating it farther back than his reign, must be at least three thousand three hundred years.

A monument three thousand three hundred years old! The mind cannot at first appreciate this amazing period of time, or see the vast proportion which it bears to the age of the world; it cannot carry itself immediately so far back into the past; but needs to reconsider, and judge of it by some familiar standard. No one, however, can do this; or can contemplate the amazing changes which have occurred in the world since the original erection of this obelisk, without the strongest emotions of interest and pleasure. Countries now highest in civilisation were then not known; while those now affording habitation only to wild beasts or wilder men were flourishing and populous cities. Troy had not fallen; Homer was not born; Solomon's Temple was not built; and Rome, Rome the leviathan, arose, conquered the world, and passed away into a mere record of her former self, within the period during which this stone has braved the elements.

ART. III. *Notes on modern Architecture.* No. 2. By AMICUS.

AMONG the buildings recently erected in the city, the Atlas Insurance Office claims notice for its generally harmonious composition: there are certain faults, but these belong more to the style of architecture than to the architect; and for this reason, I would always recommend architects to consider well what is reasonable and consistent in the style of architecture they adopt, before they put into execution large works, such as will stand for ages a monument of their taste and skill in the art. Now, however beautiful the Italian architecture may be considered, we ought to reject those combinations which will not bear the strictest test of reason; the most glaring fault perhaps in this building is, a balustrade under the sill of the window, which can be of no use whatever, but in fact is a deformity, and offensive to the eye. If indeed the windows of the room had come low enough, and the balustrade had projected from the window, the eye would have been satisfied of its utility: not only would such an arrangement have been the means of producing an agreeable and additional light; but, even in London, in the most busy part, the resort of all busy men, it would have afforded an opportunity of cultivating a few flowers and evergreen shrubs that would have enlivened the situation, and perhaps might have given a taste to the occupants never before elicited. Even if it had allowed only the opportunity of stepping out of the window, it would have been sufficient to show a reason for a balcony, and a use for the balusters. I am

aware that by these observations I subject myself to the imputation of being over-fastidious, these faults may be, and are by some very likely considered, trifling, or perhaps not faults at all, and totally unworthy of the notice of a critic; but, if latitude of this kind be allowed, where must it stop? Another part of this composition which in my opinion is contrary to good taste is the circumstance of the Corinthian columns being attached only to the wall, and used only as ornaments. Columns were the primitive supports of roofs or floors, and were of necessity fixed on solid and strong basements, and detached, for the purpose of aiding in the support of long beams and heavy burthens. They were afterwards altered from their rude forms, and decorated with capitals, bases, flutings, &c., and placed in situations where it was to be presumed that they were of real utility; but as civil commotions gradually occupied the attention of mankind, architecture declined. The minds that could invent the first elegantly proportioned columns (which are called perfect) were disturbed and corrupted; and, instead of the understanding being cultivated, and inventive genius fostered; known forms came to be considered as precedents, and were indiscriminately applied whether for use or for ornament. But let us in the nineteenth century separate the gold from the dross, and pursue the track of the founders of the art, who have produced in their great works unity and consistency of design. If, in the decline of architecture, columns were introduced as ornaments only, it must have arisen from the poverty of invention of the artists of the time; but, if defects are allowed to be copied from all works of antiquity, merely because they are antique, architectural propriety remains only a term, and is not understood. Perhaps it will be said, from the style in which this building is designed, that, where richness was required, no other kind could be used but that which marks the character of the style; but, although the style may be correct, which I do not deny, it does not follow that it is consistent. If a design with a certain degree of richness were required, and the designer restricted to no particular kind of style, there would be great scope given for the inventive genius of the architect: and, if architects were to lay aside the trammels of their art, and strike out a new character, although a difficult task, I do not hesitate in saying that a style of architecture might be produced perfectly consistent with our wants, our luxuries, and our customs, philosophically correct in utility and construction, and beautiful as a work of art. The creative genius of a painter is not merely confined to his materials. The architect is a painter also, but his materials are of a more stubborn nature; he should, however, shape his blocks of stone as the painter sketches his forms, he should distribute his

recesses and breaks as a painter does his lights and shadows; in a word, he is a painter in chiaroscuro, but with materials of a graver nature. I should not have said thus much respecting this building, had I not been assured that the style of architecture called Italian is now very much the fashion. This style and the Elizabethan manner seem to take precedence of all others. It is strange too, considering that both are allowed to have marked the decline of the art in the age when they were originated; and the only reason I can assign for the preference now given to them is, that they are less restrained by fixed rules than the more perfect styles and manners. This reason alone calls for another style, which might be based upon the beauties and principles of pure art, unshackled by rules founded on uses different from those for which it is intended, and adapted to the wants of our climate, and the customs of our country. The faults in the Atlas Insurance Office originate entirely in the style; for the architect has produced a good effect; and, as a general composition in the modern Italian manner, it is one of the best in London.

Had the architect searched for novelty, I have no doubt that he would have succeeded in producing decorations to his windows equal in richness to those given in his design, but more consistent in subject. I feel assured that he would have soon had a host of would-be-architects endeavouring to cry him down as an innovator, because he could not cite a precedent in antiquity for his works; but he could only be spoken of in this way by the few who look upon the works of antiquity as perfect, and not to be improved; who are contented with the forms handed down by our ancestors, and who will never stretch their imaginations even to a possibility of improvement.

It is gravely asserted by some, that no new idea can be produced in architecture; but is it possible that such assertions can be serious? If the inventors of Gothic architecture had held these opinions, the orders of the Greeks would have been continued to us, with only the modifications which a difference in civilisation would necessarily produce; and, had such opinions been universally held, architecture would have been reduced to mere mechanical rules, and would have been unworthy of the title of fine art. But, fortunately for the admirers of original architecture, this is not the case; and the architecture of the middle ages ranks high as a fine art, perfectly distinct from that of the Greeks.

I continued my walk down Cheapside to Milk Street, where, enclosed by shabby brick houses, stands the new school. The style of this building is Gothic; and here I shall have much more to complain of than in the last building, because the style has not been properly adhered to. First, I take it for granted,

that when the style of architecture of any proposed building is fixed, whether it is Grecian or Gothic, or a style of the architect's own invention, the *character* of that style should be scrupulously adhered to; all its beauties carefully studied, and all its defects as carefully avoided. If I determined to build in the style of architecture of the sixteenth century, I would endeavour to arrange and compose my design in such a manner that the character of the period should be distinctly carried through the whole composition, although not one feature might be copied from an existing example. In this manner, a design might be produced in the *character* of the sixteenth century, which might yet be perfectly adapted to the wants and habits of the present age; and this I believe to be the only mode of copying the ancients that can be considered legitimate. Modern English architecture, particularly as exemplified in the lately erected buildings in the streets of London, may, I think, be divided into two kinds: — First, That style of architecture where temples, porticoes, towers, windows, buttresses, &c., are avowedly taken as precedents, and reproduced in modern buildings, and which I think should be called *copied architecture:* and, secondly, The style of architecture which preserves the general characteristics of a known ancient style; and which, without servilely copying any of its minute forms or details, produces such an infusion of its laws and spirit as shall clearly mark its character, which may properly be called *imitative architecture;* and in which, if the architect considers the works of the ancients merely a base or foundation on which to build his style, he may produce works of sufficient merit to hand his name down with honour to posterity. To these may probably, at some future time, be added a third; for, were the mind of an architect of genius to be allowed unfettered sway, he might produce a work which would have no existing prototype, even in its general characteristics, but which would be consistent with the principles of utility, philosophy, and the highest walks of art; and such a work would justly merit the proud title of *original architecture.* According to this scale, how few modern buildings can be ranked under either of the last-named titles! and how both London and the country groan with the productions of mechanical minds, which may very properly be called copied architecture, and which require only the feeblest kind of mental exertion to copy and combine the forms of which they are copies! In giving these designations to buildings, however, a due regard must be paid to their respective merits; for instance, the crude forms and unskilful works of the Sandwich Islanders, however original they might be in their general features, could not be compared with works of art, which are the result of

reason and high cultivation. But to return to the school in Milk Street: as a general design, it is not happy in its effect; there is a straggling of parts, and an inharmonious arrangement in the whole, which wearies the eye. The building is erected with brick and stone: now in the first place, where so much money has been expended in richly carved stone decoration, I feel a little disappointed that any material of inferior quality should have been used; less decoration would be more proper in a building of this nature, and the money thereby saved might have been expended in making the whole building of stone (or faced with stone), which would have produced, in the first place, harmony of materials; a thing of importance with regard to the propriety of the composition. In the next place, when buttresses are used, they should be consistent with the rest of the building; and placed at such distances, and in such situations, as would render it evident to the eye that they were required. The resistance of an arch or a roof in a flank wall is expressed by a buttress, which evidently marks the precaution of the architect in placing his supports in proper situations: it also marks that the architect is not only conversant with the ornamental branch of his art; but with its mathematical science, showing a sufficient and economical application of materials; neither overpowering his building with unnecessary burthens, nor endangering its stability by weak construction. When this is done, the eye of an architect becomes satisfied by the construction; for when the effect produced upon his mind by the external character of the whole building is harmonious, he scrutinises almost instinctively the scientific construction; that the foundation and plinths are sufficient to bear the superstructure; that the buttresses are enough to sustain the resistance of the groined arch, or open wood roof; that the tower joins justly with the body of the building; and, if a spire, that the proportions are such as to indicate sufficient strength to carry it satisfactorily: in short, the balance of parts should be such, that, when the building is viewed from a certain point, there shall be no obtrusion of minor importance to the principal feature; and no unskilful construction, which can leave a doubt as to the stability of the work.

In Gothic buildings the windows generally are the most important features, and no parts require more attention than these; they are, next to the doorway, the most useful in every building, and the architects of the middle ages seem to have considered that the decorations of their windows should be in proportion to their usefulness. They seem to have thought that the light of the heavens should be admitted through the most gorgeous portals; the sun's bright rays were multiplied

into numerous parts by elaborate tracery, and tinged with the most brilliant colours, as they were transmitted into the buildings. Windows were then made the most splendid features of buildings, as they were to admit the most useful and splendid of nature's benefits to man. How badly the general compositions of the modern windows are designed, I need not dilate on, and I will confine myself to the building in question as an instance. In this building we have the windows exceedingly feeble in detail; the mullions in some smaller than in others; and in every case they are so small, that the effect, spirit, and boldness, which characterise the windows of the middle ages, are lost, and they appear tame and wiry; the openings are of various widths, thereby destroying the harmony of the building; the oriel, or projecting, windows of the sides are too rich for the windows under them, which are mean and tame in the extreme; these windows have no cusps in them, whereas almost all the others have, which alone is a great defect, as this kind of bad economy (if it be economy) totally disunites the parts. I conceive, to produce a harmonious composition in Gothic architecture, that all windows should be traceried, or not traceried (except such as may be called eyelets only which cannot be governed), and that the openings between the mullions and transoms should be of the same size, or nearly so, that is, the difference should not be so great as to make an obvious distinction; and that all contrasts required by windows should be produced by additional divisions, thereby increasing the sizes: that all mullions of equal-sized windows should be of the same substance and form; and that in larger-sized windows, only, the mullions should be increased, and that to as many orders as the design may require. I have mentioned before that as the window is the most important feature in Gothic architecture, so the portico stands the most conspicuous feature in Grecian architecture; and it would be as inconsistent in a Gothic window to make the openings between the mullions (or, if I may be allowed the term, to make intermullions) of various widths in the same building, as it would be to make the intercolumniations of a portico of various widths. I take these parts as the leading characteristics of their different styles of architecture, conceiving that the same principles of taste and reason apply to each. The mixture of cusped and uncusped windows in Gothic buildings is also, in my opinion, a breach of taste; on the principle that the balance of decoration is destroyed, and that the lavish display in the one case, but ill assorts with the humble simplicity in the other. Contrast and repose are to be produced more by a proper distribution of enriched features and blanks, in the general and large parts of a building, than by multiplying decoration on

some of the minor parts, and stripping others to such a degree as to make them become meagre; and, as small parts depend upon their relation to each other for their general harmony, care should always be taken to prevent their being made too opposite. A variety in form may be admitted, but a difference in character would be discordant: for instance, porticoes containing two or three varieties of columns would be, to the most uninitiated, a defect; and, for the same reason, Gothic windows containing mouldings, tracery, and details, of different dates, in the same building, would be equally defective. The different divisions of Gothic architecture are as distinct in their character and form, as are the different orders of the architecture of the Greeks.

London, September 1. 1837.

Art. IV. *Candidus's Note-Book.*

Fasciculus VIII.

" Sicut meus est mos,
Nescio quid meditans nugarum; et totus in illis."

I. Worse and worse! While polychromy comes in to upset all our nicely established notions of Grecian taste, a suspicion is also started that the venerable Vitruvius himself, Hosking's old woman, is neither more nor less than an impostor; at least that the writings palmed upon the world as his are the productions of some " unknown," several centuries after him. Neither is this all: for it is now discovered that the ornamental forms of furniture, and articles of luxury, hitherto received as Grecian, are, on the contrary, all of Egyptian origin, unless the Egyptians borrowed them from some earlier people. Shade of Thomas Hope! what a perplexing discovery! Why could not Rossellini let us rest at full length in the luxurious bliss of ignorance? — why must he rudely startle us from our repose by such intelligence? So, then, there is positively nothing new under the sun! All the taste which the artists employed by our Rundell and Bridges can exert in devising Grecian patterns for vases, tazzas, and similar articles, has been anticipated some thousands of years ago, by people living under dynasties whose titles are only so many algebraical signs!

II. It glads me to find that, after so much delay and so much talking on the subject, Mr. Barry's new Houses of Parliament are likely to be begun; a vote of 88,000*l.* towards the building having been carried by a majority of 80 against 20, or of four fifths. According to one paper, Sir George Strickland said that he did not think the public generally were in favour of Mr.

Barry's designs; yet he did not mention any other as having given more general satisfaction. His own opinion respecting them is certainly any thing but flattering, if it is true that he said the style proposed would be a lasting disgrace to the taste of the country! It seems, however, that we show no better taste in any other style; for nearly every one of the more important buildings erected of late years has been pronounced quite the reverse of creditable either to the profession or the nation.

III. Of newspaper exactness in matters of fact we have a curious specimen in the account lately given of the Waterloo banquet; wherein it was stated that the gallery in the Duke of Wellington's mansion is 200 ft. long by 88 ft. wide; dimensions considerably exceeding those of Westminster Hall itself, one of the most spacious apartments in Europe. What the proportions of this gallery may be as to height, we were not informed; but an apartment of the width specified must at least be between 60 ft. and 70 ft. high; whereas, to say nothing of height, it is evident there can be no such room in the house, even supposing it to occupy the whole of it, to the exclusion of any other.

IV. Among the *on dits* of the day it is reported that the Reform Club, being about to rebuild their habitation in Pall-Mall, invited six architects to a competition; conditioning that the party whose design should be approved of should be remunerated by a specific sum, instead of the usual per-centage. The gratuity was to be 1000*l.*; but it was demurred to, as being less than what the customary five per cent would amount to. On this, the committee agreed to raise it to 1500*l.*; but even this offer was not more graciously received than the former one; and there, it seems, the matter rests for the present; the architects applied to not only having refused to accede to such terms, but having protested against them "upon principle," like Gervase Skinner. If this version of the story is quite correct, the profession, at least those six individuals belonging to it, stand up for a system in itself most absurd and anomalous, and withal highly derogatory; since it is one that makes the remuneration of talent, real or supposed, utterly independent of talent, and regulates it by circumstances which have nothing whatever to do with ability; nay, so far from it, that the greater the bungling extravagance, the greater the reward. The per-centage system is one against which both common sense and common decency most loudly exclaim.

V. In his print of False Perspective, Hogarth quite overshoots his mark; for he has there brought together such extravagant blunders as the veriest tyro would hardly commit: but it would prove an essentially instructive lesson in works on perspective, were instances produced of mistakes that have actually been committed in pictures and prints; nor would it be by any

means a difficult task to collect many very glaring ones, some of them no doubt occasioned by the too common practice of making up a view from sketches of detached parts taken from different stations and distances, and not afterwards corrected when put together.

VI. There is, I believe, no complete *monograph* work on the subject of doors,—not doorways, but doors themselves, exhibiting all the various modes of paneling and decorating them; or, at least, the chief combinations, for to enter into them all would require a voluminous publication. One mode, little resorted to, is that of carving or otherwise ornamenting the styles, and leaving the panels plain; which is attended with much effect, particularly if the styles be covered with plates of bronze or coloured in imitation of it. Where it is necessary to admit light, instead of doing so through a glazed compartment just above the door, the more preferable way, I conceive, would be to fill all but the lower panels with open scroll work of metal, with glass behind it; that is, where expense is less a matter of consideration than appearance. Yet, notwithstanding that doors admit of such great diversity in regard to design and decoration, and are capable of being rendered exceedingly important and characteristic features both in exterior and interior architecture, it rarely happens that we find any study bestowed upon them: on the contrary, the architect seems generally to consign them entirely to the carpenter, as belonging to his province. The doors of St. Pancras Church are almost a solitary example of that study and finish which ought to be bestowed on such parts; while as for those in the majority of our churches and public buildings, so far from exhibiting aught partaking of either, they are sadly deficient, being frequently most common-place in design, and insignificant in appearance; and that, too, where there is a good deal of pretension in other respects. Difference of colour, whether expressive of difference of material or not, is a further source of variety, according as the panels are of a lighter or darker tint than the rest of the door, or of the same or another hue.

VII. There is, I am informed, a German artist named Gegenbauer, now resident at Rome, who practises with great success a peculiar mode of fresco painting, which possesses both facilities and advantages of execution unattainable according to the usual one. His process consists, it seems, in laying a ground of stucco or whatever may be the composition he employs, upon a strained canvass, with a raised edge of proper thickness to receive it; whereby it becomes, when hardened, a slab. This being done, he paints his subject upon it; and, as the slab dries, keeps the part he is working upon in a state to receive the colours, by moistening it through the canvass at the back. By this means he is able to unite his tints, and finish up his picture, just the same as

in any other mode of painting, and to get rid of one great inconvenience and drawback attending performances in fresco, at the same time that he secures to the work the durability which fresco possesses above oil. Frescos thus executed may afterwards be inserted in walls; and some, I understand, have been purchased by Englishmen and sent over to this country. It is obvious, however, that such a process is quite unavailable for subjects upon a very large scale, or intended to cover an entire wall.

VIII. "The Brandenburg Gate at Berlin," says Mr. Gwilt, "is little less (more?) than a copy of the Propylæa at Athens: *such examples do not entitle a person to the appellation of architect!*" Did the censure here conveyed fall upon Langhans alone, no one else might care for it; but the fact is, it touches a great many others besides him, quite as much, if not more; and not only those who deal in *rifacciamenti* of the prints in Stuart's *Athens*, but those who follow the Roman and Italian styles. Nay, the generality of modern triumphal arches bear a much closer resemblance to that of Constantine, than the gate at Berlin does to the Athenian Propylæa; for the former has no ascent of steps leading up to it, has no wings attached to it, no pediment, no external hall with columns and doorways; so that between the copy and its prototype, there are at any rate several "pretty considerable differences." That these differences constitute improvements, I certainly do not mean to affirm. Coming from the quarter it does, the remark itself is all the more startling, because it goes very nearly to rob Gibbs of all the merit of what generally passes for his chef-d'œuvre, namely, the portico of St. Martin's Church, which is a still more decided copy of that of the Pantheon at Rome, than the Brandenburg Gate of the structure it is said to be a repetition of. Not but that there are also striking differences between the one portico and the other; since, to say nothing of the Roman one being octostyle, it has columns within it, whereas that attached to the church has none; and, instead of having a single large doorway, it has three doors with *arched* windows above them, of most tasteless design; while, as if to render the middle door not only different from the other two, but insignificant in comparison with them, that is arched but does not rise higher; consequently, its imposts are much lower than the lintels or horizontal architraves of the two side ones. Whereas, were this centre doorway to be made square-headed, and carried up loftier than the others, the windows expunged, and other door-cases and doors substituted for those we now behold, the whole portico would be very greatly improved. In this case, also, there would not be anything, as at present, to mar the effect of the columns, which latter constitute the whole merit of this piece of architecture; all that properly belongs to Gibbs, and that can "entitle

him to the appellation of its "author," being remarkable for its inconsistency and inelegance.

IX. Welby Pugin has just published another *Apology* for his *Contrasts*, to which he has appended some tolerably virulent strictures on the present state of the arts in this country; not at all complimentary to print-dealers and the getters up of annuals. According to him, and he really seems to have set himself up as an apostle of popery, Roman catholicism is not only the most efficacious, but the *sole*, nurse of art in modern times. Yet I think he would be strangely puzzled to support his arguments by facts; since he ought to be able to show that art had never declined in catholic countries; that the schools of Italy and Spain continue, if not precisely the same, very nearly the same they once were; and, also that Portugal has greatly distinguished itself by its achievements in art, being favoured no less than Italy by the joint influence of both climate and religion.

ART. V. *A Letter from* Mr. GEORGE GODWIN, Jun., A.I.B.A., *on the State of Architecture in the Provinces, to the Conductor.*

DEAR SIR, When I informed you, a few weeks ago, that I intended to make a hasty tour through some of the inland English counties, you asked me to give you, on my return, some notion of the apparent state of architecture there; and, although I am at this moment so much occupied as to be unable to do so very fully, I cannot refrain altogether from complying with your request; the more especially too as all that I have seen has tended to convince me that the improvement in taste as regards architecture, happily now observable in the London public, and the consequent increased effectiveness of its professors, are not confined to the metropolis alone, but have taken place every where. In nearly all the various towns that I have visited, buildings for public purposes are now in progress, which reflect the greatest credit upon those to whom they are confided; the ordinary houses display more elegance in design than has been the case heretofore (to say nothing of improved construction), and in buildings for farm purposes, and in the labourers' cottages on the road sides, an excellence of arrangement, and a neatness in appearance, are apparent, mainly brought about (I feel bound to say) by the circulation of your excellent *Encyclopædia of Cottage Architecture;* where it is again and again reiterated, that, if you would raise the moral condition of the agricultural population, the first step should be to provide them with airy, cleanly, and well arranged dwellings, and to induce them to feel an interest in maintaining them so.

In BIRMINGHAM the building of the greatest importance, at this time in progress, is Edward VI.'s Free School, designed by Mr. Barry. This is now nearly completed, and affords a fair evidence of the skill with which that gentleman will carry out his beautiful designs for the Houses of Parliament, if permitted to act according to his own judgment. The style in which it is built is of the latest period of pure Gothic in England, namely, that which prevailed immediately before the importation of forms from Italy, which took place about the commencement of the sixteenth century, and led to the mixed style known as Elizabethan. It is a little earlier than the date of the king by whom the school was founded, but is, unquestionably, the style best adapted to modern domestic purposes. I may not now pretend to enter into an examination of the merits or demerits of the building, or I should, in the first instance, point out its well designed corridors; and, in the second, express regret at the baldness of the side elevations, as compared with those of the back and front: my general impression, however, is, that it is not merely an ornament to Birmingham, but to England. The amount of the contract was, I believe, 35,000*l.*, but the contractor is said to have lost much money by the undertaking.

With the Town-Hall all your readers are, doubtless, well acquainted. It is proposed shortly to commence casing the back-front (at present unfinished) with stone, and thus to complete this which is really a noble exterior. It is intended, too, under the direction of Mr Charles Edge, architect, to clear away many of the small buildings by which it is at present surrounded, so that it may form a termination to some of the principal streets, from which, at this time, it is invisible. On the importance of situation to such a structure it would seem almost unnecessary to speak, it is so apparent, and yet we continue day after day to erect buildings without any regard to it. The French give much more attention to this point than we do: the present intention of the authorities in Birmingham, however, in regard to the Town-Hall, shows that a proper feeling on this head is becoming more general; and, as it will, in this instance, especially improve the appearance of the whole town, it should be warmly applauded.

The Birmingham Cemetery Company recently incorporated have laid out a large plot of ground for their purposes, on the road to Soho, bounded on one side by a perpendicular cliff of the rock on which the town is built (the new red sandstone, if I remember rightly); and in the face of this they propose to excavate and construct vaults for the dead. A small tetrastyle Doric temple, of pleasing proportions, has been built from the design of Mr. Edge, before mentioned, to serve as a chapel; and a handsome enclosure of piers and gates erected. It appeared to me, when on the spot, that Egyptian architecture might have been

introduced with increased effect, and the excavations in the rock might ultimately have formed a second series of "the tombs of the kings." While speaking of Birmingham I cannot avoid making one remark in regard to the dilapidated state of Aston Hall, a fine pile of building in the Elizabethan style (with park and lodges) which is situated about two miles from that town. The interior, I am told, is well preserved, but the exterior which presents many interesting features for the architect and antiquary, is, in some parts, falling into ruin. It would be a real service to the present opulent proprietor of the mansion, were some friend to point out to him, how much more expensive it will be to restore that to-morrow which to-day may be maintained at comparatively little cost.

At CHESTER, a city, by the way, full of interesting remnants of past times, there is little in progress, with the exception of a lodge at the entrance to the grounds of Eaton Hall, the seat of the Marquess of Westminster, which is a copy of St. Augustin's Gate at Canterbury. It is executed in Bath stone, under the direction of Mr. Jones of Chester; and, although but a duplicate, must be deemed a valuable work, as tending to diffuse a taste for the beauties of pointed architecture.

In LIVERPOOL, however, the resident architects appear to have plenty of opportunities to display their taste and skill; indeed, the improvements which have been made there within the last ten years, and the extension of the town which has taken place during that time, are, perhaps, unprecedented. Vast ranges of warehouses now occupy ground formerly covered by the river, and many houses which were erected a few years ago as rural retreats, are now in the midst of a densely populated neighbourhood, and are surrounded by manufactories.

A new Custom-House, by Mr. Foster, which has three octastyle porticoes of the Ionic order, and will boast a room of great size, is fast approaching to completion, but not sufficiently so as to warrant the expression of an opinion on its merits. The Mechanic's Institution, built by Mr. James Picton, architect, which, as you will remember, was destroyed by fire a short time ago, before the workmen had entirely left it, is now again completed, and appears to be admirably arranged for its purpose. The theatre, 60 ft. by 55 ft. affords seats for 1200 persons; and there are several spacious class-rooms, some of them 50 ft. long, attached: the original contract was 10,000*l.*, and it must be as pleasing to the philanthropist as to the architect, to see such a building erected for such a purpose.

In addition to these structures, there are several good private houses now building, one or two new cemetery chapels, and the Apothecaries' Hall by Messrs Cunningham and Holme, which promise well.

You are aware that an Architectural Society has been established at MANCHESTER by the junior members of the profession; and, although only a short time has elapsed since its formation, Mr. Richard Lane, Mr. Atkinson, and other of the leading local architects, have joined it; and, through the exertions of Mr. Hance, the honorary secretary, the nucleus of a library has been already provided, and facilities for study afforded: I need hardly say how earnestly I wish it success. Near the Royal Institution, a building of Italian character, I think, is now in progress, from the designs of Mr. Barry, for the purposes of the literary society known as the Athenæum; and Mr. Lane is erecting a School for the Deaf and Dumb, with chapel, &c., at a short distance from the town. This gentleman is also engaged in superintending the distribution of a large plot of ground in the London Road, incorporated by act of parliament, and called Victoria Park, which will contain within itself, it is proposed, pleasure-grounds and a church.

In LINCOLN some restorations are being effected at the Castle, by Mr. Edward Willson, well known as an archæologist, which seem to be most scrupulously performed; and some very interesting investigations, touching the ruins of the Bishop's Palace in that city, are in progress under the direction of this same gentleman, and of — Mainwaring, Esq., the tasteful owner of the estate. This was originally an extensive building comprising a large dining-hall, kitchen, butteries, &c., and appears to have been built at different periods, ranging probably from the 12th to the 15th century. The details, which possess remarkable simplicity and beauty, could be well applied in modern buildings (where expense is generally considered); and it would prove of service to the art, were Mr. Willson to publish some of the many drawings of them which he has made.

The concrete foundations for the intended Fitzwilliam Museum at CAMBRIDGE are all formed, indeed have been so for some time; but I cannot help feeling that both the extent of the ground and the situation of it are unworthy of Mr. Basevi's beautiful design. I must now, however, terminate these crude remarks, which, I fear, have already exhausted your patience; and yet I cannot do so without an observation in regard to the general good feeling towards the Institute of British Architects, which is entertained by every member of the profession in the country, whom I have had the pleasure of meeting. All seem to look upon this association as the great means of raising the character of our noble art; and, to prove how anxious they were to evince this good feeling, it may be enough to state that the simple connexion which exists between myself and the Institute, as an humble member merely, was sufficient to procure me the greatest attention; and I ask your permission here to thank, for their kindness, Messrs. Edge, Picton, Hance, Lane, Willson,— indeed

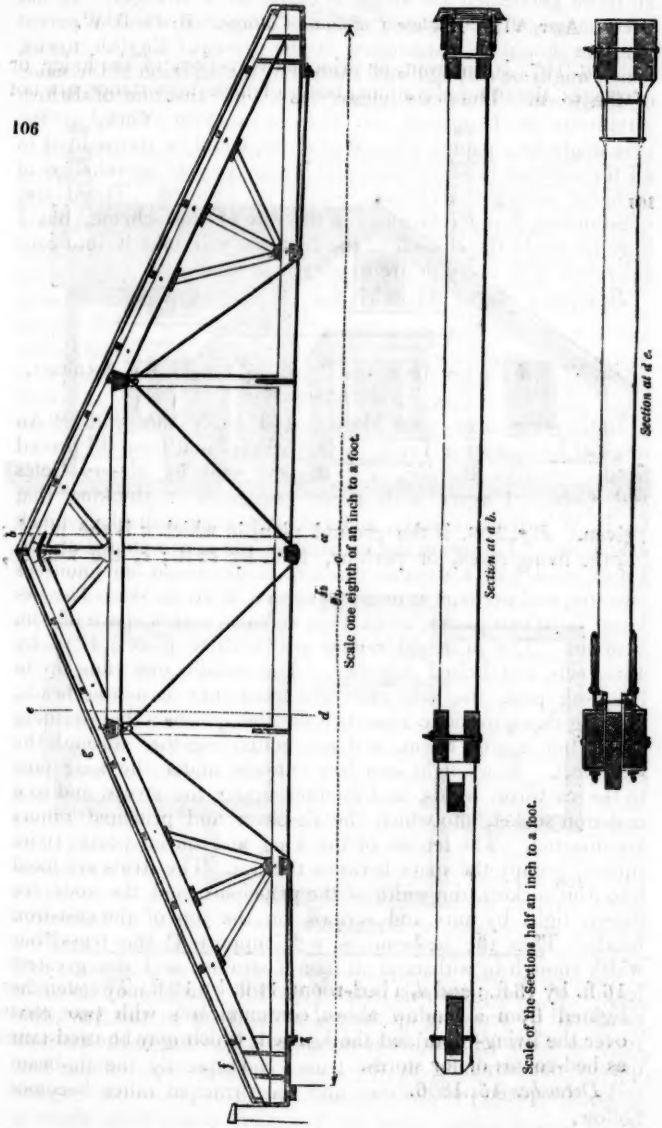
all those gentlemen on whom I called as a stranger. It has been suggested that branch societies connected with the parent institute should be established in the principal English towns, which might be distinguished merely by the addition of the name of the town. Thus, we might have The Institute of British Architects at Liverpool, or The Institute at York, as the case might be; papers deemed of *value*, could be transmitted to all the societies in succession, and a more perfect interchange of opinions amongst architects would be effected. There are, questionless, many difficulties in the way of this scheme, but I have no doubt the council of the Institute will take it into consideration with every desire to overcome them.

Brompton, August 31. 1837.

ART. VI. *A Design for a new Truss.* By A. Y. W., Architect, Liverpool.

IN looking over your Magazine, I lately met with "An original Design for a Truss, by G. B. W.;" and from it I turned to the remarks thereon, and designs sent, by Messrs Coles and Cook. I agree with these gentlemen in thinking that G. B. W's. truss is faulty, and I do not think it displays much originality. Following the example of the above-named critics, I also send you a design, which I think would be found as effective, and perhaps as original, as that of G. B. W. The tie-beam is in two pieces, 15 in. by 4 in. each, with a space of 4 in. between. The principal rafters are in three pieces, 12 in. by 4 in. each, and bolted together. The middle one runs up to the king post, the side ones are fixed into cast-iron heads, flanging down to make a mortice for the queens; the straining pieces but against them, and are bolted together through the king post. A wrought-iron bar extends under the king post to the cast-iron heads, and another under the struts, and to a cast-iron socket, into which the tie-beam and principal rafters are inserted. The tenons of the king and queen posts (10 in. square) occupy the space between the ties. The struts are fixed into iron sockets, the width of the principals, and the rods are drawn tight by nuts and screws, on the top of the cast-iron heads. Thus the tie-beam is well supported; the truss has width enough to withstand all lateral strains; and the greatest length of the principal rafter (*fig.* 106. *f* to *g*) may even be cambered by screwing up the rod at *h*. It is in this part that roofs so often fail; and in many cases it is owing to the assistant queens not straining in the truss; consequently the tie-beam sinks, the queen post follows, and the principal rafter becomes hollow.

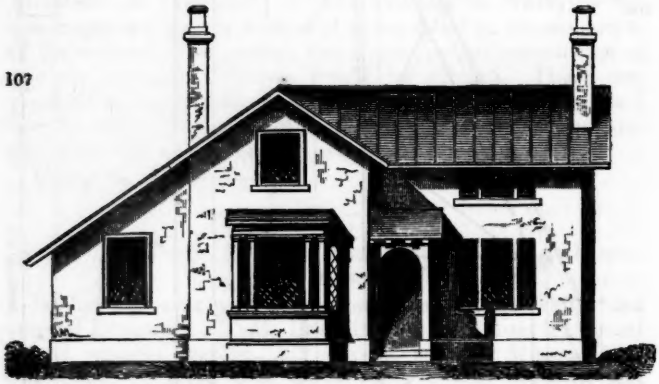
Liverpool, March 3. 1837.


106
Scale one eighth of an inch to a foot.
Section at a b.
Section at d e.
Scale of the Sections half an inch to a foot.

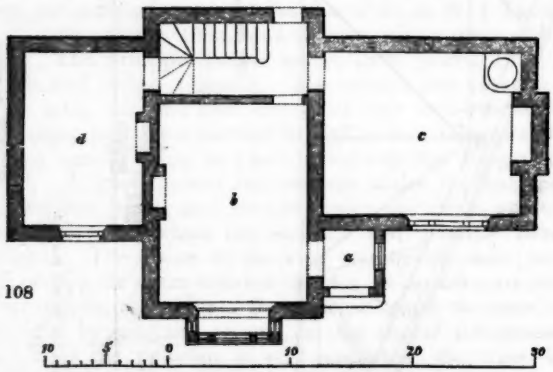
ART. VII. *A Gate Lodge, or Cottage.* By G. B. W.

FIG. 107. is the front, or principal elevation, of the lodge or cottage: the other elevations, being of little importance, are not

107



given. *Fig.* 108. is the ground plan, in which *a* is the porch; *b*, the living-room, or parlour, 16 ft. by 12 ft.; *c*, the kitchen,



108

16 ft. by 13 ft.; and *d*, a bed-room, 14 ft. by 10 ft. The staircase, lighted from a window above, communicates with two rooms over the living-room and the kitchen, which may be used either as bed-rooms or for stores.

December 15. 1836.

REVIEWS.

ART. I. *History and Antiquities of the Manor House and Church at Great Chatfield, Wilts;* forming Part II. of *Examples of Gothic Architecture.* Third Series. By Thomas Larkins Walker, Architect, &c. London, 1837.

LIKE the first part of this series (containing the "Vicar's Close at Wells"), the present one consists of a single specimen, so fully illustrated in all its features and details, as to form a very complete study of a singularly interesting and valuable example belonging to the time of Henry VI. Without reference to this particular subject, and its claims to attention, more, we conceive, is to be learned from a single building thus treated of at length, than from two or three different ones described in the same number of plates as are here devoted to this alone; because, to understand one fine specimen of the kind thoroughly, is likely to prove more instructive than several exhibited only partially. Thus far, therefore, we consider this series to be a decided improvement on the two preceding; while it is fully equal to them in regard to excellence of both drawing and engraving. Certainly, Mr. Walker has been not a little fortunate in meeting with so perfect and admirable an example of ancient domestic architecture reserved for his pencil as that with which he has now presented us, and which he has thus rescued from whatever accident or injury may befal the building itself. We say, fortunate, because, when we examine it, we feel rather astonished that he should not have been forestalled by some one else; whereas, we do not recollect to have before seen even a view of this house, except in the *Gentleman's Magazine;* from which but a very imperfect idea can be formed even of its general character.

Although strictly domestic, and without any approach to the castellated or ecclesiastical style (for there is nothing to remind one of either church or castle), this mansion exhibits the four-centred pointed arch in some of its windows; wherein it differs from most examples of the so-called Tudor. There are, likewise, not a few particulars which distinguish it from the generality of houses of a similar class. We find here no parapet, either embattled or plain; no ornamental string-courses; no paneled surfaces; neither those rich stacks of chimneys, nor chimney-like pinnacles, so conspicuous in themselves, and so frequent in domestic buildings of the Tudor period. Yet, if herein it may seem deficient, it possesses features rarely met with elsewhere similarly disposed: four gables in the principal front, a larger and smaller one, placed contiguous to each other, above each of wings; two oriels, of different designs, and of peculiar elegance; a single shaft rising at one of the inner angles formed by the centre compartment of the elevation and the wings, which,

although but very little ornamented, is well composed; together with heraldic and other figures crowning the summits of the four gables in front, and those of the hall, which extends transversely to it. The front is, moreover, remarkable for its symmetry as regards its leading divisions and outline; and it may be described as consisting of a centre retiring a little within the two double-gabled compartments before alluded to, but which do not exactly answer the idea of wings, they being much wider than the intervening space, and projecting only a few feet, yet so as to produce a bold effect of light and shade when the sun falls on this side of the building, which is north, somewhat inclined towards the west. Such effect, too, is considerably aided by the splayed buttresses turned diagonally at the angle of each of these side divisions next to the centre. Thus far, the design is uniform, as it is likewise in the arrangement of the oriels and other windows; but, as already observed, the oriels, one of which is placed beneath each of the larger gables, differ both as to form and ornament; that to the west forming three sides of an octagon, while the other is semicircular in plan, and crowned by an exceedingly rich parapet, or cornice, with open work of strawberry-leaf pattern. The pointed windows beneath the lesser gables are similar to each other; but, while under the one on the eastern side there is another window, the corresponding situation on the western side is occupied by the arch of the recessed porch. The middle division, therefore, does not contain the entrance; neither has it any windows below, but only two in the upper part, giving light on that side to the hall, which occupies the height of the ground and chamber floors. These windows differ from the other pointed ones only in being larger; and, like them, they have labels, or hood-mouldings, returned below in the form of a square placed diagonally. The absence of apertures here, in the part corresponding with the ground floor, not only contributes very much to repose and solidity, as well as to variety, but also imparts a certain picturesque expression to the whole. Yet, notwithstanding that it is one of those circumstances so characteristic of, and so effective in, this style of architecture, so far from being at all affected by modern designers, it is one which they seem most particularly anxious to steer clear of.

There are, in fact, two besetting sins, which, with here and there an exception, pervade almost all our attempts in domestic Gothic; the one is that of making uniform ranges of windows on every floor; which, even supposing their design and details to be in good taste, produces an air of monotony and insipidity in the *ensemble*, that in itself is a deviation from the character of the style proposed; the other consists in falling into the very contrary error of making hardly any two windows alike, but of

all sizes and patterns, and so jumbled together, that an elevation becomes a mere hotch-potch. Those who err in either way cannot possibly do better than study attentively the example of Great Chatfield Manor House, since, in this respect, it exhibits a most happy medium. At the same time, however, that the degree of irregularity here observable is no more than suffices to break up strict uniformity without at all interfering with unity of composition as regards the general distribution, we do not hold it to be indispensable; nor that perfect symmetry ought invariably and studiously to be avoided, as inconsistent with the genius of the style itself; provided there be also contrast and variety combined with it.

The interior of the house at Great Chatfield, which is very fully described by sections and parts at large, is certainly far from being a model for a residence at the present day; yet it is not on that account less deserving of attention, inasmuch as it will be found to furnish much information, and not a few hints that may be turned to excellent account. The oak screen in the hall, the details of which are drawn to a large scale on a separate plate, is a beautiful and highly useful specimen; because it would be applicable to various decorative purposes. The mode, likewise, in which the dressing-closets are disposed on the upper floor deserves notice; while the contrivance for admitting a view from them into the hall, although not likely to be had recourse to by a modern architect, is no less ingenious than curious; there being in each of them a small aperture, partly disguised by a mask, the eyes of which are also perforated, and thus serve as peep-holes; a proof, were one needed, that the architects of those days understood how to turn to account whatever they might be called upon to provide in the way of novel conveniences and expedients.

Besides the twenty plates devoted to the house, there are seven others of the church; situated at the distance of about 50 ft. from the north front of the former; also another, showing the rich altar tomb in the chantry chapel at Corsham church, belonging to the family of the Tropenells, who erected the mansion at Great Chatfield, and respecting whom much information is given in the historical portion of the work. The intrinsic beauties of this volume will sufficiently commend it, without farther praise from us; we shall therefore, in addition to what we have already said, merely express the hope that it will aid in weaning many from their sickly prejudice in favour of Elizabethan architecture; which, in spite of the "meretricious taste" (as Mr. Walker justly terms it), and the barbarous nonsensical fancies it displays, is now, unhappily, in great vogue among those with whom fashionable repute is the sole criterion of either beauty or other merit.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

National Taste in Architecture.—"The public at large has a claim over the architecture of a country: it is common property, inasmuch as it involves the national taste and character; and no man has a right to pass himself and his own barbarous inventions as a national taste, and to hand down to posterity his own ignorance and disgrace, to be a satire and a libel on the knowledge and taste of his age." (*Dr. M'Culloch's Highlands of Scotland*, vol. i. p. 359.)

Gothic Architecture.—"The Gothic style grew out of the difficulties which, in Germany, opposed the complete developement of the older and more massive manner of Lombardy, and which the increasing science of the free companies of architects alone enabled them to surmount. They deviated at once from every principle of Grecian or Italian growth, by adopting in the interlacing of their groined roofs a pointed arch, supported by rows of lofty corresponding pillars, and counterpoised by the concealed arches of the ailes, or by the perforated buttress and its pinnacles; but, surely, they displayed superior science in mechanical arrangement, when they ventured to trust a vast incumbent weight to counterpoises so admirably adjusted. Nor was their taste inferior to their skill, or less guided by principle. They gained, and they appreciated the effect of uncircumscribed *height*, the dimension of all others most impressive on the human mind and imagination, from which every language has adopted the term *sublimity*, or some cognate metaphor. To enhance that effect, they gradually, but systematically, discarded all the ornamental horizontal mouldings and entablatures essential to the Grecian colonnade, but calculated to break their loftier elevation into measured parts, and to check the eye and fancy in their upward flight. By the small and delicate foliage which, in proportioned masses, garlanded their clustered pillars, or enriched their corbeled ceilings, they created a seeming distance, which contributed by its illusion to a still greater apparent altitude." (*Quarterly Review*, Feb. 1837, p. 70.)

Improved Church Bell.—A new species of church bell, or gong, has just been invented by a blacksmith in Thuringia, which is much less expensive than the ordinary church bell, but is, nevertheless, quite as powerful. This bell consists of three bars of steel, forming a triangle.

Painted Ceilings.—I should be glad to learn whether you have succeeded in getting any account of the school of design which the Board of Trustees are instituting in Edinburgh, for the training of pattern-drawers and decorative artists of every kind. I could not help thinking of the want of such training among our artists, when I was this morning shown, as a *chef-d'œuvre* of art, a painted ceiling, on which, among other incongruities, there were birds said to be pursuing butterflies; but both species of animals having been copied from works of natural history, the birds were some lying and some flying on their sides; and the butterflies all presented their backs to the spectator, and were therefore flying with their bellies uppermost!—*T. P. London, May*, 1837.

Cuir mâché.—Mr. Joseph Esquilant, 25. St. Alban's Street, Lambeth, has recently invented a mode of manufacturing flowers, and other articles for decorating rooms, of leather, prepared in the same manner as paper is for *papier mâché*. The advantage of using this material is, that the articles are tougher and more durable. A specimen, which was shown to us by Mr. Esquilant, was thrown from one end of the room to the other, and pulled at both ends with considerable force, without suffering the slightest injury. We trust some eminent architect will examine this invention, and patronise its author as he deserves.—*Cond.*

Art. II. *Foreign Notices.*

BELGIUM.

Antwerp. — A Royal Society for the Encouragement of the Fine Arts has been established in this city, consisting of a numerous body of subscribers. The directing council is composed almost entirely of artists, with the burgomaster as president. They have an exhibition of the works of living artists every year, during the month of August, which is thrown open gratuitously to the public; the only charge being an optional one of about sevenpence for the catalogue. The exhibition which has just closed was highly creditable to the artists of the country, and contained above five hundred objects, many of them being worthy to be placed in the rooms of any metropolitan annual exhibition, much more in that of a mere provincial town. This Society also offers premiums, the subject for which, in sculpture, was, this year, "Epaminondas, mortally wounded at the battle of Mantinea, drawing the shaft from the wound, the moment he ascertains the victory of the Thebans." In architecture, there were two subjects; the one for a bazar, or building calculated for holding a fair in, in a principal town in Belgium; the other was for a Gothic Roman Catholic chapel for the accommodation of sixteen persons, to be placed in the park of a prince. The designs generally for the former of these subjects were conceived in a very loose and straggling manner, and in the French taste, with very little reference to practicability. There were twelve candidates; and a medal, with 500 francs in addition, was voted to M. Franc Jacques Stoop. For the Gothic chapel, there were seven designs; and a medal, with 500 francs also, was awarded to M. François André Durlet. This design had considerable merit; for, although the style chosen was excessively florid, the artist evinced considerable knowledge of Gothic architecture, a taste for which is now very general among the architects of this part of the Continent. The drawings for these subjects formed part of the exhibition, as well as several other architectural drawings, executed with considerable ability. M. Serrure, one of the professors of the Academy, exhibited eight drawings, executed by himself and his pupil, M. P. Erkes, consisting of elevations, sections, and plans of the famous tower of the cathedral at Antwerp, to a scale of one fortieth of the original size; so that three of the sheets, 10 ft. 9 in. high, represent the whole height of the tower, with all the details elaborately and clearly drawn, and to such a size as to distinguish each minute portion of the carving and tracery. These are about being published with some letterpress; and the engravings, which were also exhibited, reflect the utmost credit upon the talents of M. Corr and his pupils, Messrs. Collette and Linnig.

Belgium, so rich in monuments, offers but two publications that deserve to be mentioned; viz., *Choix des Monumens, Edifices, et Maisons les plus remarquables du Royaume des Pays-Bas*, par M. Goetghebuer; and, *Collection de Plans, Coupes, Élévations, Voûtes, Plafonds, etc. etc., des principaux Monumens d'Architecture et Sculpture de la Ville de Bruges*, par M. Rudd. But the former of these works is far from being complete; and it would be in vain to look in it for those beautiful churches, the cathedral at Antwerp, that of St. Waudru at Mons, or of St. James at Liège. M. Rudd's publication does not contain anything beyond what refers to the town of Bruges.

Notre Dame, the ancient cathedral of Antwerp, ranks among the first of the Gothic edifices not only of Belgium, but of all Europe. The spire, by the height and boldness of its construction, as well as by the elegance of its ornaments, is deservedly an object of admiration to every amateur of the fine arts, as well as a monument not to be rivalled by modern architecture. Notwithstanding the inimitable beauty of this masterpiece, no one has hitherto made it the subject of an especial and minute description, answerable to the grandeur of this splendid pile. A great number of engravings and

lithographs have been published; but they all have been copied at a distance, or seen by the means of optical instruments, and upon so reduced a scale, that they represent but an indistinct mass, which precludes all possibility of judging and appreciating the delicacy, richness, and variety of the minuter ornamental parts of this admirable structure.

M. Serrure has undertaken this task; and, at the expense of several years of incessant labour, and sacrifices of every description, has just finished this work on the steeple of the cathedral of Antwerp.

Availing himself of the scaffoldings, which (in consequence of the order given by the magistrates of the city, in 1826, for the thorough repair of this beautiful monument) had been erected, and by causing others to be erected at his own expense, he has been enabled to measure and examine closely from its summit (to which no one before him had been able to ascend) every small portion of fine workmanship, which, viewed at a distance, appears but a rough and unwrought piece of masonry.

This work, which now is offered to the public, is, then, the fruit of several years of labour; and, being entirely classical, is the only one of this description that ever was published in Belgium. Interesting to all amateurs of the fine arts in general, it will at the same time furnish to those who apply themselves to the study of architecture, the most varied, as well as the most graceful, studies, on one of the most beautiful types of the Gothic style.

The work, which is to consist of eight engravings, will be published in three numbers, the two first of which will each contain three engravings; and to the third and last, which is to consist of two only, will be added a text explanatory of the engravings, and an historical account of the monument.

The price of each publication is 22 francs, to be paid at the time of delivery. The price of the work, when complete, will be raised to 76 francs.

There were also in the exhibition at Antwerp several specimen engravings of a work on the wooden, and other Gothic, houses of Belgium, from drawings by Messrs. Serrure and De Kuyfer, which it is also proposed soon to publish. This is a production which we should hail with the greatest pleasure; for, instead of the rarity which there is in this country, of complete authentic specimens of domestic architecture, an abundance meets the eye of the architect in the Belgian cities. On the quay at Malines (Mechlin) are three houses almost adjoining each other. One is a wooden house, with its framing distinctly marked, its enriched panels and carved gabels, and other embellishments of a similar nature: near it is a stone house of four stories high, each overhanging the other about 9 in., which is decorated in the most florid style of pure Gothic from the pavement to the uppermost story; and in which there is not a space the size of one's hand which is not elaborately, beautifully, and appropriately wrought. The next house but two presents a *façade* of the Italian revival style, with columns and entablatures, not in the vulgar distortion-like proportions of the times of Elizabeth and James, but worthy of a Baldassare Peruzzi. It is now a common beer shop; but the good-natured landlady, if she perceives a stranger admiring the *façade*, invites him in, and, leading him up a circular *Gothic* staircase, introduces him into her bedroom, the front chamber on the first floor. This is a grand saloon, about 30 ft. by 25 ft., and from 15 ft. to 20 ft. high. The chimney-piece is designed in the most exquisite manner, in the Louis XIV. style; not the barbarous, tasteless, formless, contortions now forced upon us, but full of novelty and variety directed by grace. The marble sides run up to the ceiling with suitable embellishments; and in the centre is an elegant gold frame of the same period, filled with a fine glass. The rest of the room, the doors, the dado, the walls, the ceiling, are all in the same style, and form a striking contrast with its present destination. Such was the residence of one of the merchant princes of the olden time at Malines, better known to us as Mechlin, the emporium of beautiful lace. Of such illustrations, we understand, will the work on the domestic architecture of Belgium consist; and we trust that

it will meet with the success to which its novelty, style of execution, and importance entitle it. — *M. J. B. A. September*, 1837.

SPAIN.

Architecture and Engineering in Spain. — "The means of investing capital profitably in Spain are beyond all calculation; and the desire of Spaniards to see foreign capitalists arrive increases every day. The national property now on sale is valued, at the least, at twenty millions sterling: it is of every kind and description, most favourable to well-directed industry: 3000 leagues of roads are to be made, the contractors for which will have a monopoly of the tolls; harbours are to be cleared and bridges built; all of which would return a rate of profit to the speculator such as we have long ceased to dream of in England. An eminent French engineer has just contracted for the erection of twelve bridges in Spain, upon condition of having, for a certain number of years, the tolls now taken at the respective ferries: he will be looked upon as a benefactor by the country, and will realise a fortune by the undertaking." (*The Policy of England towards Spain*, as quoted in the *Morning Chronicle*, August 25. 1837.)

GREECE.

Present State of Athens. —The *Courier Grec* contains the following article:— There are very few foreigners who have a knowledge of the state of Athens at the present moment. It is commonly judged of from descriptions written before it became the seat of actual government. At that period, Athens presented only an immense mass of ruins, among which there could scarcely be reckoned twenty elegant houses. Two years have elapsed since then, and these ruins have for the most part disappeared; they have been replaced by several paved streets, adorned with fine houses and public buildings. There now exists at Athens a civil and a military hospital. The mint is calculated to attract attention from its fine proportions; adjoining it are several well-built barracks, a printing and a lithographic office, and thirteen small churches. Four large churches and a university are about to be erected. The new palace of the king will bear comparison with the finest Grecian buildings of antiquity. Already there are in Athens twenty public wells, besides which, all the public establishments, as well as many private houses, possess their own wells. The houses pay a small tax for the water. All these wells are supplied from two sources; one of which rises on Pentelicus, and the other at the foot of Hymettus. When the first census was made in 1833, the population was 7000 souls: at present it exceeds 18,000, including the garrison and foreigners. It is rare to meet a beggar in the streets of Athens; and, in fact, their number is small compared with that of the population. For the instruction of youth, the town of Athens possesses great advantages. It is the seat of a Greek university, and of a college, where the government has founded thirty pensions for the benefit of poor students. There is a Greek school, a parish school, and other primary schools for the instruction of children in reading and writing; and we ought not to pass over in silence the girls' school, directed by Madame Volmeranhe, in which fourteen young girls are brought up at the expense of government. (*L'Echo du Monde Savant*, August 5. 1837.)

Art. III. *Domestic Notices.*

ENGLAND.

Paving Streets with Wood. — At a meeting of the Marylebone Vestry, held Aug. 26. 1837, "Mr. Stead was introduced to the Vestry to state his plan for paving Oxford Street with wood. He said that the plan had been approved of by Sir George Rennie, Mr. G. Rennie, Mr. Gibbs, Mr. Braithwaite, and

other engineers, and that they had expressed their surprise that it had not been adopted in London. It had been found to answer exceedingly well in St. Petersburg and New York, and possessed great advantages over the usual mode of paving, inasmuch as the cost would be less, the durability greater, and it would be unaccompanied by the noise which the present system is of necessity subject to. The plan had been seen in operation in the Netherlands by Mr. Rennie, who highly approved of it. Mr. Stead was requested to furnish the Vestry with a written statement of his plan, which he consented to do." (*Morn Chron.*, Aug. 28.) It appears that this mode of paving has been tried for about a year and a half past in the Broadway, New York, and found to answer very well. The wood employed was that of the Robínia Pseùd-Acàcia, cut into hexagonal pieces, about 1 ft. long and 10 in. across. Another experiment is now being made, with square pieces of pine and other woods, with boards placed under them, where the ground is not firm. (*Newsp.*)

The National Gallery and Trafalgar Square. — It is, I believe, generally allowed that the National Gallery is an architectural failure, and that one of its greatest defects is want of height. Now, anything at all of a plantation, or even a railing, must tend to make that defect more apparent; and I do earnestly hope that the square will be left as free from every thing that can interrupt the sight as possible. I would suggest that the entire area should be covered with flag stones, and that the centre should be ornamented with a fountain, something in the style of the fountain in the gardens of the Palais Royal. I would further suggest, that there should not be any enclosure whatever; and it would then remain a place surpassed by none in Europe. (*C.* in *Morn. Chron.*, Sept. 6. 1837.)

Wellerstedt's Patent Marine Metal. — The following paper has been sent to us in a printed form; and, as we consider it deserving the attention of architects and builders, we have given it a place in our pages: — "Having been induced, by the proofs submitted to us of the valuable properties of this metal, to become the purchasers of the patent, and having now completed our arrangements for its manufacture on an extensive scale, we beg to invite attention to the advantages it offers. About five years since, some sheets were applied to the roofs of several buildings (amongst others, to the police office in Bow Street, and the Swedish church in Prince's Square); and these, on recent examination, have been found as free from corrosion or decomposition as when first put on; the surface presenting a perfectly smooth and even appearance, unaffected by the changes of temperature to which the metal has been exposed; while lead, applied at the same time on the same buildings, was much cracked and puckered in all directions. Specimens corroborative of this statement may be seen at the factory, proving decisively the peculiar adaptation of this metal for the purpose of roofing: for gutters, waterspouts, &c., it will also be found highly advantageous; its malleable qualities admitting of its being easily wrought into any form which the angles of a roof may require; and if, the edges are carefully lapped together, the covering will be perfectly water-tight without solder; which, however, may be applied as an additional security if desirable. These advantages we are enabled to offer with a metal that weighs 1½ lb. and 2 lb. to the superficial foot; whilst lead is never used of a less weight than 4 lb., and slate and tiling are considerably heavier. This superiority in lightness will at once be perceived to constitute a very important inducement for its application; as it obviously renders a much less substantial, and therefore less expensive, framing necessary for its support; and the same consideration will demonstrate the economy of its application, as a substitute for lead, for listings and a variety of other purposes in ship-building, and for lining cisterns and coffins, its hardnesss causing the retention of the form imparted to it, however thin the substance. The sheets are usually manufactured 8 ft. long, by 2 ft. 6 in. broad, weighing from 1½ lb. to 2 lb. per foot superficial, but may be varied in size. The present price is *5d.* per pound, with a liberal allowance to plumbers and other tradesmen by whom it may be purchased for resale;

and with whose interests we have no desire to interfere. — *Y. D. and Co. Limehouse, February* 1. 1837."

DEVONSHIRE. — *Exeter Lower Market.* Mr. Fowler's original estimate for this admirably arranged building was 13,414*l.*; but, since the building was commenced, several additions were made to it not contemplated in the original plan, by increasing the vaulted cellars to three times the extent originally proposed, and by various other alterations; and yet, notwithstanding all these, the expense is still nearly 100*l.* within the original estimate.

ISLE OF WIGHT. — *Building Churches.* Owing to the extent of the population in the Isle of Wight, a meeting was held at the Town Hall, Newport, where a church has not long since been reared, for forming a body in aid of building more churches there. The large saloon which the party assembled in contained some of the rarest specimens of Grecian and Roman sculpture, which the late Sir R. Worsley possessed. — *F. Lush. April*, 1837.

KENT. — *Tunbridge.* The line and works of the South-eastern (Dover) Railway is now being set out, under the superintendence of Mr. Peter W. Barlow, the resident engineer of this division. — *W. Tunbridge, March* 16. 1837.

SURREY. — *Dorking.* Holmwood Chapel, near Dorking, is in progress, under the direction of J. B. Watson, Esq., architect, of Manchester Street, Manchester Square. The style is early Norman, and it will be built entirely of the fine sandstone from Coldharbour Village, Leith Hill, at the expense of the surrounding gentry. Mrs. Arnold has subscribed 1000*l.* towards the chapel and endowment.

Kingston. — The foundation stone of Hook Chapel, near Kingston, has been laid: it was much wanted; and the late Mrs. Savage left by will a sufficient sum to endow it, assisted by contributions from her various friends. This chapel is also from the design of Mr. Watson: it is of the style of architecture prevalent during the reign of Henry III., and will be finished early in the spring.

ART. IV. *Employment of Painting on the Funeral Monuments of the Greeks.* Extracted from the *Nouvelles Annales des Voyages* for May and June, 1837.

(Read at the Ordinary Meeting of the Institute of British Architects, held July 24. 1837.)

THE recent discoveries on the polychrome decorations of ancient Greek architecture have excited the zeal and attention of *savans* and artists. Traces of colour have been found on the interior, as well as the exterior, of the great monuments constructed of marble, which are still preserved in Greece and in Sicily; and the abilities of the learned, as well as of the artists, have been actively applied to the solution of the question, how far the taste of the Greeks for decorating their monuments with various colours really extended; and what were their notions of the beautiful and the simple, in the application of colours to the marbles of which their temples were built?

As one discovery leads to another, it has happened that very recent proofs have been obtained of this use of colour by the ancients on a description of monuments where, certainly, we should not have suspected it. In examining the ancient cippi discovered in the excavations at the Piræus, near to Athens, traces of figures painted on the polished surface of the marble have been detected. The German antiquary, Dr. Ross, has communicated his observations upon this subject in the following letter, dated Athens, the 5th of October, 1836, which has been published in the *Kunstblatt*: —

"During the progress of the excavations made last spring, under my

direction, amongst the tombs of the Piræus, we found several sepulchral stones, with the remains of architectural ornaments executed in painting; a circumstance which served to confirm my former observations. I was still, however, at first induced to consider them as exceptions; but a very recent discovery, which had been made during the works carrying on for filling up the marsh of the Piræus, has convinced me of the importance of these examples towards our knowledge of the use the ancients made of lithochromy. On this occasion we found nine or ten cippi, bearing traces of painting in different states of preservation. There are but few of the temples of Greece now left standing; and, although we recognise in them designs of ancient ornaments painted on various parts of the entablature, the friezes, slabs, and edges, we are still in the dark as to the choice of the colour made use of. But the discovery of painted ornaments on funeral monuments cannot fail to lay open a vast field to our researches on the use of colours in architecture. To speak only of Attica, the city of the Piræus, and many other towns of this district, fell into decay at an early period; so that many places of interment were abandoned, even whilst the fine arts were still flourishing. In these deserted spots, the funeral monuments gradually fell to the ground, and were buried beneath the soil, the dry quality of which was favourable to their preservation. In this manner they lie in thousands on the vast plains between the Piræus and the Bay of Salamis, and between the Ilissus and the Promontory of Zoster, where the tombs are close to one another. If we were minutely to examine a large proportion of these stones, we could not fail to arrive at some important facts on the choice and combination of the colours applied to such monuments. What would be of still more importance, would be to observe the figures and groups so painted on the stones. Who knows whether we might not thus discover some of the works of Polygnotus, of Myron, and other celebrated Greek artists? If we were to judge from the colouring on the two cippi found at the Piræus, this style of painting was practised, not by indifferent hands, but by the masters of the art. Possibly, we might thus bring to light some great work of the art of painting applied to stone."—*M. J. B. A.*

Art. V. *Retrospective Criticism.*

Errata.—In p. 410. l. 22., for "been considered," read "continued." In p. 415. l. 11, 12., for "discovered," read "disseminated."

In my article on Cemeteries, p. 431. line 22. from the bottom, I am made to say, "Sometimes inconvenience is sustained by *walking* down the hill." It should be *working;* that is, if the interments commence at the top of the hill, and proceed downwards, the decomposition of the animal matter, following, of course, the slope of the ground, is found exceedingly disagreeable. —*J. A. Picton. Liverpool, Sept.* 17. 1837.

Whether G. B. W.'s Truss, or Mr. Coles's Truss, is the better. (See p. 270.) *G. B. W. in reply to Mr. Coles.*—Since I am as ready to confess an error as Mr. Coles can wish, I will commence by admitting that I certainly did *not* understand his sketch-plan; and I suspect that many others of your readers did not, until they saw his explanatory letterpress. I also admit that I was wrong in stating that he had borrowed my method of scarfing; but, really, Messrs. Coles and Cook cooperate so extremely well, and are so associated together in my mind, that I trust I may be forgiven for the slight mistake of attributing to one what, in reality, was the act of the other; for your readers, on referring to Mr. Cook's design (Vol. III. p. 143.), will find that he, at least, has condescended to borrow from me. Having now, I hope, proved to Mr. Coles, that, although he is contending with an adversary who declines assigning to himself "a local habitation and a name," it is one who has no wish to "shield himself behind three initials," I will proceed to "the point at issue." Now, although this said "point at issue" may be "whether G.

B. W.'s truss, or Coles's truss, is the better," I do not consider that *he* is the person to decide it; and Mr. Coles labours under a great mistake, in supposing that I will allow, as a conclusive decision, his mere dictum that my design is bad. Mr. Coles should recollect that the case stands thus:—I submitted a design to the opinion of "the public" through the medium of the *Architectural Magazine*. He found out that it was very faulty, and forthwith sent you his design, as being superior to mine, and Mr. Cook did the same. I therefore maintain, that we are competitors; and, as such, it is natural that each should consider his own to be the best; but it does not follow that, upon the opinion of one, the others are to rest satisfied, without appealing to an impartial and competent tribunal. Had Mr. Coles confined himself to merely pointing out and commenting upon what he considered defects in my design, instead of bringing forward in opposition to it his own, and attempting to prove its merits by a disparagement of mine, I think he would have obtained for his opinions more consideration and attention from your unbiassed readers.

I most distinctly repel and deny the charge he makes against me of wishing to "*shirk* the question:" nothing is farther from my intention. Mr. Coles's last communication contains another specimen of that garbling and perversion of sentences which I before complained of; in proof of which I must refer a little back in the correspondence. How did the proposition for omitting the lower king-post originate? Did I suggest it in my first communication? No: it was called forth by Mr. Coles's critique upon the design (Vol. III. p. 95.), in commenting upon which (Vol. III. p. 142.), I said, "His objection to my design is, that the king-post truss derives its whole support from the side, or queen-post, trusses. Now, I see no reason why the queens should not be the principal supports of the truss; indeed, it is what I intended in making the design; and I introduced the lower king-post truss for additional strength; but, were the span less, it might be dispensed with entirely." It must be clear to any one reading this sentence, that my object was to show that I considered the queen-posts to be the chief supports of the truss, and that I did not attach the great importance to the lower king-post truss which Mr. Coles did. But mark how ingeniously, though I certainly cannot say ingenuously, he distorts my meaning:—"It is a tacit admission," says Mr. Coles in his last communication, "that something is wrong, when we find that he could fain reduce the span of the roof to enable him to remove the objectionable part of it!" How he has arrived at this conclusion from the sentence of mine just quoted, is beyond my comprehension; but I now tell him, 1st, I have made no tacit admission of something being wrong; 2dly, I have no wish to reduce the span; and, 3dly, I do not wish to remove the king-post: indeed, so far from considering it *objectionable*, I think it of great use, as forming a component part of the combination of trusses (which Mr. Coles himself approves); but not, as he would have it, the chief and indispensable feature of it. The latter part of my sentence, which Mr. Coles construes into a "tacit admission," &c., was merely written to show that the same principle of construction, simplified by the omission of the king-post, would be applicable to roofs of a smaller span; but, decidedly, it expresses no wish to reduce the span of the original design. Surely, as Mr. Coles has so strangely misunderstood me, he will be as ready to acknowledge his error as I have mine. I will now say a word about the principle of the truss which Mr. Coles has expressed such contempt of. A short time ago, in looking over a book, with which, I doubt not, he is well acquainted (Tredgold's *Principles of Carpentry*), my eye was attracted to a design for a roof by its similarity to my own; and, upon examining it, I found that the principle was exactly that of mine. The span is 80 ft. (4 ft. only less than mine); it is supported by a truss formed by the abuttal of the principal rafters against two queen-posts, and a straining-beam. There is the same "want of continuation in the principal rafters," which he and Mr. Cook so much deplore; and, lastly, there is *no lower king-post*. I here have on my side a high and unquestionable authority, in support of the principle so much contemned by my opponents; for

Mr. Tredgold, in a paragraph subsequent to his description of it (sect. 169. p. 89.), recommends it as superior to another given.

With regard to the doubt as to the originality of the method of scarfing shown in my drawing, I can only say "'T is strange, 't is passing strange," that I should have selected the identical mode practised by the Winchester carpenters "for fifty years," as well as that chosen by Mr. Cook upon the very same occasion; especially, when I assure him that, among the many different scarfings in use, and engraved in books on carpentry, I never saw this!

As Mr. Coles has so freely and unceremoniously attacked my design, in his philanthropic zeal to do good to me and "the public," I should be sorry if, through any mistaken feeling of delicacy, I were to omit performing the same kind office for him. My own defence having occupied so large a space, I am compelled to postpone a few remarks I have to make upon Mr. Coles's truss; but, in an early number I shall probably follow his example in addressing a benevolent caution to "*him and the public.*"—*G. B. W. London, Sept.* 4. 1837.

A Word in behalf of modern Houses. (p. 295.)— In reply to a part of an article by W. H. L., headed as above, in the June Number of your useful Magazine, p. 295, where he observes, "Were we to believe many persons," I have only to ask, Is he, then, so little conversant with mechanism, or political economy, as not to know that the movement is caused by the action of the greater of two bodies? and if the public, the "many," say so, it is a fact, and he ought incontrovertibly to believe that buildings have greatly deteriorated within the last century. To support his argument in the succeeding paragraph, he satirically observes, "This may be done either by invidiously comparing or *contrasting* the best works of a former period with mediocre ones of the present." Now, to prove that the *contrasts* have been well received (which I need not tell you evinces their worth), we need advance no further than the bitterly envious, but cleverly brought-to-bear, Italicism above. A grand production, as well known to the scientific, as the *Pickwick* is to the laughter-loving, Briton, is attacked in flank; and it is affirmed, in *dubious* phrase, that the *contrasts* are "invidiously" chosen. As they are taken on an equality, if one be mediocre, so is the other: for instance, Angel Inn, Grantham; Angel Inn, Oxford, and so forth.

Stuccoed exteriors, with architrave mouldings and cornice of the same, W. H. L. appears partial to, by his remark on the houses in Bedford Row, quoted as something to be sneered at. I will direct his attention to the Episcopal Palace, Durham, as a building of the olden time, occupying a commanding site: opposite, place the Bishop's town residence, Grosvenor Square, or any other house in that *quartier*, of commanding exterior; then, if the deep relief in the mouldings of the former, occasioning that immense and truly grand variety of light and shade, cannot touch his inner man, or if he "cannot discern any superiority of any kind" in it, although that supreme judge, the eye of the public, has decided in its favour, let him persist in preferring his two-inch relief stuccoed pilaster and cornice.

Rendering to all their due, and proving that I am neither Christian, English, nor Goth alone; also, that improvement has of late years taken place with respect to public buildings, I will select for your cognisance that meagre and paltry attempt at restoring the Gothic, the Guildhall of the city of London, with that *chef-d'œuvre* of the Grecian in this country, Birmingham Town Hall opposite (the merits of which have been so fully developed in this work). You will agree with me, that "Birmingham wins in a canter." But, with respect to private houses, Why, I ask, are you discontented with brickwork? For, as the hair of a countryman, left to its natural resources, exceeds in duration that of the fop who uses Rowland's Macassar, or other stimulant, however attractive it may be for the time, so far shall such houses as those in Bedford Row exceed in duration of material, and preserving their external appearance, those of "West Strand" and Regent Street, those summits of perfection to the stucco lover.

There are a few stone houses in Lombard Street and elsewhere, of probably

a century and a half standing, which will in age overtop them all; such, at least, the probability is; and this it is which, being generally known, causes the builders to imitate it with a composition so frequently seen in the principal streets of London, cajoling the house-hunting public with the idea that it is equally lasting as stone; when, in the course of the first sharp winter, they will one morning rise and find all the mouldings and more prominent parts lying shattered in the area of the basement; then the deluded wights too late perceive their error. "Had London houses been built to endure for ages, all their original defects and inconveniences would have been perpetuated." (See p. 297.) The material ones, no doubt: but who can boast of finding one half the number of internal inconveniences in a house of the Tudor and Elizabethan period, that are to be found in a house bearing the cognomen of "first-rate" in London; the walls of which are half the thickness, and carried up three times the height, of the former; so that, setting aside the staircase, and the necessary absence of closets in the walls of such rooms, if it should be a corner house, what think ye of smoky chimneys, occasioned by the damp inhaled by a brick-and-half wall? Such, with various other matters, are the advantages of the present rage for street building in London.

Where is there to be found a self-interested person who would not willingly attempt to preserve some preposterous Anglo-Grecism of his own? If any one should happen to say, "Architects have every reason to bless the window tax," and that attempting to obtain more light is a "preposterous fashion," I should at once say, "Behold the man." You may undoubtedly have as much window as you please, provided you make a proportionate solidity of base, and do not commence nearer the angles than would be *in keeping* with the height of the house; as, for example, "Burleigh House," Lord Exeter's, near Stamford, and a wing of Wilkins's National Gallery, or other such naked affair. Which has the preeminence? Judge ye. — *G. B. L. July* 11. 1837.

The Encyclopædia of Cottage, Farm, and Villa Architecture. — We are frequently gratified by letters informing us of the good which this work has done in creating a taste in proprietors for having better cottages and farm-houses on their estates; but we also receive occasionally (and it is surprising that this is not the case oftener), letters of a contrary description. We lately received one of these letters from a gentleman, a wealthy merchant in a country town, who, intending to build a country house, procured the *Encyclopædia*, and, as he informs us, looked over all the designs it contains without finding one which would suit his purpose. He therefore finds fault with us for undertaking to write a work which, being entitled an *Encyclopædia*, ought, he thinks, to have given him all the information he required. As this gentleman gave us his name and address, before answering him, we submitted a copy of his letter to an architect of great experience, and of whose sound sense we have a high opinion, and we give the following extract from the architect's letter here, because we think it calculated to be useful both to the purchasers of architectural books and to architects: —

"Mr. ——'s expectations of what your book ought to contain remind me more than anything else of the description of Utopia, where the pigs run about ready roasted, crying, 'Come eat me! come eat me!' In like manner, he would have houses to suit exactly every possible taste or caprice, arranged like pies in a pastrycook's shop, 'Come build me! come build me!' I suppose he expected to have nothing else to do but tear a leaf out of your book, and put it into the hands of his builder, to procure an estimate and set to work. But, jesting apart, I do think, although there is some truth in several of his remarks, that he has rather overstepped the bounds of legitimate criticism. In fairly judging of the merits of any work, every person of candour will take into account the circumstances and difficulties attending the undertaking, and pronounce sentence accordingly. Your *Encyclopædia of Architecture* commenced a new era in publications of the kind: the trouble, difficulty, and risk, attending a work of that nature, must have been immense; and, with me, the wonder is, not that the work is not superior, but that, under all the circum-

stances, it is half so good. It is much easier to criticise works than to get them up. The talent of finding fault is one which is pretty generally diffused, and seems not likely to grow rusty for want of using. Again, if I understand the object of your *Encyclopædias*, both of *Gardening* and of *Architecture*, it is to lay down, in as familiar a manner as possible, the principles of each art, as derived partly from nature, and partly from the conventional ideas of taste and convenience prevalent in society; and to illustrate these principles by examples. Now, in respect to gardening, nature being uniform and constant in her operations, generalisation is much more easy, and the precepts and examples given will be of all but universal application. Far different, however, is the case as it regards architecture. Even supposing general principles to be agreed on, the 'wise saws,' when applied to 'modern instances,' are liable to such a variety of modifications from circumstances beyond control, from whim, caprice, taste, and the ever changing fluctuations of fashion, that all the volumes ever written on the subject from the time of Vitruvius to the present day would be insufficient to suit a tithe of the cases which are every day recurring; and, admitting that the examples given in your book are some of them mediocre, and others below mediocrity, 'gimcracks,' or any other opprobrious term that a disappointed man may apply to them, still the great end is gained; viz. that of *furnishing ideas*, giving hints, and teaching the reader to reason from the general principle to the particular example. The very faults of the designs will do this as much as their beauties to any person who will give himself the trouble of thinking. I apprehend your book was never intended to make 'every man his own architect.' A man, of course, may be so if he pleases, as he may be his own lawyer or his own doctor; but, in each case, he will probably have to pay for his experience, and deservedly so. I will give you an instance of what I consider the legitimate use of your *Encyclopædia*. A gentleman in this neighbourhood, wishing to build a villa, was recommended to me. He had read your work, and, consequently, could give me some notion of what he wanted (which, by the by, is not always the case). He pointed out one of the designs as having pleased him. I saw at once the points which had struck his fancy, and took care to preserve these in my design, although in other respects it was totally dissimilar. The consequence was, that my first sketches submitted to him gave such satisfaction, that I had no occasion to alter a line, except the size of one or two of the apartments.

"A great deal of the information as to matters of cost required by your correspondent would be better obtained from the *Builder's Price-Book* than from any other source. In my opinion, the generality of your readers would scarcely have thanked you for substituting even for the descriptions of Deepdene and Alton Towers information as to the prices of solid and veneered doors, the difference in expense between folding and sliding doors, &c. Now, supposing that 100 or 200 pages of your *Encyclopædia* had been occupied with this sort of information; of what possible use would it have been to any reader not professional? and your professional readers do not want it. I know something of estimating buildings; and I venture to say that, if a person not practically acquainted with the subject were furnished with the price of every article in a building, he could not make a correct estimate without the knowledge of a variety of details of construction, which no books can teach him, and experience alone can furnish. Take, for example, the carved ceilings, about which your correspondent enquires: a ceiling may be carved or enriched in a thousand ways, and each mode have a different price. The cost of verandas, again, as every body must see, depends entirely on the pattern or design. But enough: '*Le jeu ne vaut pas la chandelle.*' I might go more into the subject, did time and space permit. In one word, general results are all that your readers are concerned with; and a compendious way of arriving at these would certainly be a desideratum."